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## BRANCH OFFICES

GLASGOW : 87, Union Street Central 4646  
NEWCASTLE-ON-TYNE: 21, Mosley Street . . . Newcastle-on-Tyne 22239  
MANCHESTER : Century House, St. Peter's Square . . . Central 3101  
BIRMINGHAM : 90, Hagley Road, Edgbaston . . . Edgbaston 2466  
LEEDS : 70, Albion Street . . . Leeds 27174

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## The King's Speech

THE extent and variety of the grave problems now facing the country, the brevity of the legislative programme to which the new Government has confined itself, and the magnitude of more immediate transport questions requiring no legislation seem to have caused the omission from the King's speech, at the opening of Parliament on Tuesday, of reference to transport—with one exception. This was to "proposals to facilitate the extension of private road haulage activities." The Government is committed in the Conservative Party election manifesto to action to extend the 25-mile limit on private road hauliers and to some measure of denationalisation of road haulage, and this probably is what the programme envisages. The allusions in the speech are in general terms, perhaps because the Government needs to be cautious in committing itself in view of difficulties ahead, some of which are discussed in an editorial article in this issue. There is no mention of the reorganisation of nationalised transport. The subject is a thorny one, and the lack of precision in the reference in the election manifesto and in Conservative members' allusions to it during the last Parliament point to the details

not being worked out. The Government in power, after it has had time to review the problem in the light of the expert knowledge and advice of its permanent advisers, may well find the complications formidable. This does not mean that reorganisation is not desirable, as we state elsewhere, or that the Government will not tackle the problem in due course. Apart from road haulage, the promised legislative measure of more immediate interest to railways and the railway industries is the repeal of the Iron & Steel Act. Here again, the reference is in general terms, but the words "reorganisation of the (steel) industry under free enterprise, but with an adequate measure of public supervision" show that efficiency in ensuring adequate supplies is the main consideration—of the utmost importance to the country, as regards the railways and the locomotive export industry, for instance, from both the strategic and the economic aspects. Finally, there is the reference in the King's speech to the shortage of skilled labour in essential industries. Action is promised *inter alia* "to ensure the best use of the labour force." There is no reference to railway manpower as such, but action in this respect is implied. The exemption of railwaymen from military service moreover can be readily effected by the Cabinet.

## Capital Investment in the Railways

THE impending exhaustion of the invested funds of the British Transport Commission with the consequent necessity of raising fresh capital was mentioned by the Comptroller, Sir Reginald Wilson, during the inquiry last week by the Transport Tribunal into the draft Passenger Charges Scheme, 1951. This raises the question of what can be spent in capital investment having regard to the manpower and raw materials available. On nationalisation, the reserve funds of the railways totalled £107 million, set aside for maintenance and renewals impossible to carry out during and after the war. It is difficult to separate abnormal from current maintenance items, but the Commission in the past three years has spent only £43 million on abnormal maintenance of the railways, which, taking into account increased prices, indicates an even smaller proportion of the original sum. Capital investment has been cut by the Treasury at various times, and even the amount authorised has been under-spent, due to the impossibility of accurate formulation of demands with constant reductions in amounts authorised, to slow deliveries of rolling stock, and to abandonment of projects because of rises in costs since formulation. Had the Treasury authorised greater expenditure before and immediately after nationalisation the situation might have been better—not least because some of the improvements envisaged would have economised in manpower. Now, however, despite some stocks of materials held by the railways, the value of any great increase in authorised expenditure would be largely nullified by shortages of manpower and materials.

## Problems Involved

AFTER referring at the inquiry to the need for further capital, Sir Reginald Wilson said there was no reason to suppose the B.T.C. could not pay its way. The fundamentals of its position were sound and there had been times when its finances were on the right side. The only reason why that balance had not been maintained had been the repeated waves of increased costs. Again emphasis was laid on the importance of being able to adjust charges quickly to meet any such changes. Moreover, apart from the limitations in capital expenditure resulting from Government restrictions referred to frequently, another factor retarding development has been the time required to sort out the many problems involved, and to decide on policy, though it was pointed out at the Tribunal inquiry that the B.T.C. is now nearing the end of this phase, and that specifications of costs in connection with a number of large-scale developments are now being prepared. Large economies from major development schemes could not be expected for about five years.

### Rearmament Manpower Problems

THE extent to which manpower shortage is being felt in the engineering, including machine tool, and other industries concerned with rearmament is shown by the rise in the past year in the number of unfilled vacancies despite an increase in the labour force; vacancies for skilled men rose from 16,000 to 36,000, and the total vacancies now number some 500,000. Rearmament is hampered indirectly by the shortage of coalminers and railwaymen; and the shortages of railwaymen and of workers on rearmament interact, more particularly in the Midlands. The situation is aggravated by the relatively small number of young people leaving school, by paid holidays, by absenteeism in some industries, and by the apparently higher proportion since the war of clerks and other workers not directly engaged on production; clerical workers, however, may indirectly help greatly to augment production, and the average working week in the engineering industries is now almost as long as before the war. Remedial measures so far taken by the Ministry of Labour and by industry include encouragement of the retention and re-employment of old people and of women, the training of skilled workers in Government centres, and discouragement of undesirable methods of competition for labour. These and other measures have been disappointing, and the new Government may have to consider some form of compulsion, though apart from restricting supplies of raw materials to concerns performing less essential work, the utmost discretion would be necessary in existing circumstances.

### Labour and the New Government

THE possibility of serious industrial disruption under the Conservative Government is envisaged by Mr. J. B. Figgins, General Secretary of the N.U.R. "Unless Sir Walter Monckton, the new Minister of Labour & National Service," he states in last week's issue of the *Railway Review*, "keeps a sharp eye on his colleagues in the Government, these fears may be transformed into living realities." The situation, he maintains, "is 1931 all over again, but with the Conservative Party not possessing . . . an overwhelming majority." He urges British Labour to appreciate the significance of the present period and the urgency of vigorous action by a radical change of policy. In welcome contrast to Mr. Figgins, the T.U.C. General Council has announced, though rather cautiously, that its long-standing practice is to co-operate with whatever Government is in power. The Council's statement that the trade union movement must always be free to formulate its own policies may indicate a desire not to be identified with the Labour Party as well as for independence of the present Government. There can be no disagreement with its declared aim of developing industrial resources and promoting a higher standard of life "over and above the main trade union function of improving wages and working conditions."

### Training of Supervisors for Industry

FURTHER recommendations for increasing productivity in British industry as a result of a study of American training methods are given in a report\* by a team which visited the U.S.A. early this year. While most of the explanatory material is related to factory supervision it is of interest to note that a similar approach is adopted in office work. The report contains many suggestions which can be applied to the needs of individual firms and there are also some general observations worthy of consideration by British industry as a whole. There is always a close connection between selection and training and the view is expressed that to enable supervision to play its full part in promoting productivity all supervisors at foremen level and above should be regarded as responsible members of the management team. Training must be an integral part of day-to-day management and there should be a periodic

review and assessment of all personnel so that likely men may be selected for more responsible positions. Greater attention should be paid to ability to understand and deal with people.

### New Methods of Track Maintenance

SOME indication of the extent of the measures adopted by British Railways to speed up track maintenance whilst cutting costs and saving manpower was given by Mr. John Elliot, Chairman of the Railway Executive, when he opened the demonstration of permanent way mechanised appliances at Marylebone Goods Station last week. The present stock of 28 Matisa tamping machines is to be augmented by 22 more at a cost of £226,000. In four areas of Hampshire, the Midlands, Surrey, and Yorkshire, each covering 40-70 route miles, and in some cases both main and branch or groups of branch lines, an experimental system of maintenance by flying squads is to be brought into use, which will revolutionise existing practices. At present each permanent way gang, usually from four to twelve men, is solely responsible for the maintenance of a given section of the line, and the tools and methods used are very largely those used since the beginning of railways.

### Permanent Way Gangs Reconstituted

IN the four areas in which the experiments are to take place the gangs will be reorganised into small groups and a few larger gangs of up to 25 men. Permanent way staff in each area will number from 30 to 130. The small groups will attend to day-to-day maintenance, such as tightening bolts and replacing keys on their stretch of line in much the same way as at present, but the larger gangs will be mobile and fully equipped with mechanical aids, and will be capable of undertaking the whole of the major maintenance work within their areas. The mechanical appliances to be used are the subject of a series of articles appearing currently in this journal. With the present acute shortage of staff, they will go far not only to economise in manpower, but also to make permanent way work more attractive. Against this, there are the problems of maintenance, and of the degree of mechanical skill demanded from the grades who will use the machines, which may well constitute a separate staff problem.

### Train Buffet Services on the G.N.R.(I.)

THERE have been various references in these pages during recent months to the enterprise shown by the Great Northern Railway (Ireland) in developing its diesel railcar and other services. Efforts in this direction have resulted in considerable economies in operating and at the same time there has been a marked increase in passenger comfort. Ten diesel train sets, comprising 20 railcars, have been working on a number of routes during the summer months, as recorded in our issue of September 7, and a feature of the Dublin-Belfast run has been the introduction of a buffet car, with a compact kitchen at the rear of the bar, from which passengers are served with meals at their seats, and in which drinks are dispensed from a trolley by an attendant who moves through the train. There are two trailer cars, which have been converted from standard type centre-corridor coaches, and one of them is illustrated in other pages this week. Dublin in recent years has developed to a considerable extent as a holiday centre and the new buffet services have proved deservedly popular when the railcars have been used for all-in tours.

### Southern Region Main-Line Diesel in Service

ON October 15, diesel-electric locomotive No. 10202 went into regular service in the Southern Region of British Railways, after a series of trial runs for the purpose of training engine crews, and on October 29 the locomotive began its full schedule of working on the West of England main line. This 1,600-h.p. locomotive, which is powered by

\* "Training of Supervisors." Published by the Anglo-American Council on Productivity, 21, Tothill Street, S.W.1. Price 2s. 6d.

English Electric Co. Ltd. equipment and is of similar design to locomotive No. 10201 described in our March 9 issue, first went into service on the 1 p.m. Waterloo to Exeter Central train, making the return working to Waterloo on the 5.55 p.m. from Exeter. Since October 29, this locomotive has also worked the 1.25 a.m. to Exeter, and the 7.30 a.m. to Waterloo. This schedule involves a daily revenue earning mileage of 687 or 4,122 miles in a six-day week. Fuelling is carried out at Waterloo daily, the average daily consumption being about 760 gal. of fuel oil, and on Sundays—the only day on which the locomotive goes to a depot—all necessary maintenance is carried out at Nine Elms.

### Oil-burning Locomotives for Uruguay

THE Central Railway of Uruguay, which comprises the former British-owned railways acquired by the State on January 31, 1949, is operated as a dependency of the Ministry of Public Works. As a result of the steady increase in traffic, the majority of the 142 steam locomotives taken over from the British companies, already nearing the end of their economic life, had by force of circumstances to be used too intensively. The urgent need for additional locomotive power was realised in an early stage of Government ownership, and an order was placed with Henschel & Sohn G.m.b.H., Kassel, for five oil-burning 2-10-0 freight locomotives. These locomotives were placed in service during the latter part of 1950 and have eased considerably the locomotive power position. A feature of the design of the locomotives, which are described elsewhere in this issue, is that while providing a firebox of adequate capacity the loading gauge is such that the foundation ring is above the wheels, and this should facilitate the inspection and replacement of stays in the firebox sides.

### Government Plans for Transport

THE appointment of Mr. J. S. Maclay as Minister of Transport & Civil Aviation, in which capacity as a junior Minister he will be responsible in the first instance to Lord Leathers, Secretary of State for the Co-ordination of Transport, Fuel & Power, puts Government responsibility for transport in the hands of two shipping men. That no danger will result of a bias in favour of shipping at the expense of land and air transport is clear from the record of both the new Ministers, some details of whose careers appear in our personal columns this week. Lord Leathers' duties as Minister of War Transport in 1941-45—his tenure incidentally was the third longest of any Minister of Transport—included titanic problems of land transport in this country in addition to those of ocean shipping in the British Commonwealth and amongst the Allies with which, perhaps, his name is more generally associated. He has besides, wide business experience outside shipping.

Mr. Maclay's previous service as Parliamentary Secretary to the Ministry of Production in 1945 is as good a qualification for his new post—which is concerned with manpower and raw materials problems on the railways, for instance—as his wartime Governmental shipping duties and his private shipping interests. The addition of civil aviation to his responsibilities implies a greater degree of co-ordination between land, water, and air transport. Now that the British air transport undertakings are well established and beginning to pay their way, with other Government departments in charge of the strategic aspects of air transport, there is no reason why civil aviation any more than other forms of transport should have its own departmental Minister.

The more immediate transport problems confronting the new Government were mentioned in our last week's issue. It seems that no time is being lost in tackling them, though Mr. Maclay's position in relation to other departments—to the Ministry of Labour & National Service, for example, in connection with the railway manpower problem—must first be established in the light of the supervisory and co-ordinating powers of Lord Leathers, who represents trans-

port in the Cabinet; and it is the Cabinet which must make the decisions on conscription of railwaymen and on any great increase of capital investment in British Railways. Of the measures affecting transport to which the Conservative Party pledged itself in its election manifesto, the easiest to put into effect probably is the increase in the 25-mile limit on private road hauliers, which, as we have suggested, is one of the legislative measures referred to in the King's speech.

In conformity with its declared aim of economy, the Government, as we pointed out some weeks ago, could eliminate the Hotels and the Docks & Inland Waterways Executives with the minimum of inconvenience to users or of administrative dislocation. Restaurant-car and refreshment-room services are so organised as to be capable of easy return to British Railways management. This is rather less the case as regards the hotels, which might be placed under a separate board pending sale of those which do not, as "railway hotels" mostly in large towns, afford a valuable service to railway users; such railway hotels, however, would seem to be an ancillary which should be controlled by the railways. Those dock and harbour undertakings which were long and successfully managed by the railways before nationalisation should be returned to them now, which is perfectly feasible without undue disturbance of their organisation. There remain the nationalised inland waterways, but little difficulty need be experienced in absorbing their powers and operations.

The return of road haulage to private enterprise and the reorganisation of nationalised transport (in the words of the Conservative manifesto) "into regional groups of workable size" are more formidable problems. Assuming what some members of the Conservative Party seem to have assumed, the re-purchase of their business by a large proportion of former private hauliers, who are to be given a chance to do so, the only large nationalised transport undertaking left for reorganisation into regional groups of manageable size would be British Railways and London Transport, with a rump of road haulage. This last might well be much bigger than was expected. The Conservative manifesto moreover did not promise any further progress towards denationalisation than the opportunity for road hauliers to re-purchase, and the Government may not wish to weaken the financial position of the railways by further facilitating road competition for freight. If reorganisation of the railways means increasing Regional autonomy, that would be welcome. As we have remarked before, to unscramble one part of the nationalised transport system would rob the remaining parts of the chance of successful operation. What is required is greater co-ordination of rail and road at Regional and District levels, with the principal officer of a Region responsible for all means of nationalised transport therein.

### The Civil Engineer's Department

IT is perhaps as a bridge builder that Brunel's reputation stands highest. The famous Royal Albert Bridge at Saltash is his last and greatest masterpiece, but well before this he gave striking proof of his ingenuity in this field in the structures which he designed for the original Great Western line from London to Bristol, notably the Wharncliffe Viaduct at Hanwell and the Maidenhead Bridge, with their remarkable flat elliptical arches, both completed before or in 1839. Since then the latter, though widened, has required only superficial maintenance, despite the greatly-increased loadings and speeds of today. Sonning Cutting, two other bridges over the Thames, the great Box Tunnel, Paddington Station, and the timber viaducts in Cornwall are added examples of Brunel's versatility. Of his presidential address delivered before the Institution of Civil Engineers on November 6, Mr. A. S. Quartermaine, Chief Engineer, Western Region, British Railways, fittingly devoted the greater part to a brief history of the construction of the Great Western Railway, and a biography of his illustrious predecessor. His location of the line from London to Bristol, with its scientific concentration in one short section of the only appreciable gradients



and curves, its otherwise ideal profile and alignment, and its principal construction works are ably described.

After giving some helpful advice to young engineers, Mr. Quartermaine discusses the railway situation today. His first main point is that both rail and road transport are vital to the country. In support he states that if all railway traffic—consisting annually of 1,000 million passenger journeys and 22,000 million net ton-miles of freight—were diverted to the roads, already congested and economically debarred from improvement, a national tragedy would result. Moreover, the strategic value of the railways would be lost. The most urgent problem today, he declares, is the integration of all forms of transport, a task now being undertaken by the British Transport Commission. It is estimated that the existing railway system would cost about £3,000 million to construct today. Such an invaluable heritage must not only be maintained and used to the best advantage, but also improved, to ensure that the country reaps the greatest benefit from it. Reduction in operating and maintenance costs is essential, but wise capital investment on improvements is equally necessary. It is important that the confidence of the staff is strengthened by the knowledge that the industry must advance, and that policy will be directed to that end. The present necessary curtailment of capital expenditure, if carried too far, may cripple the railways permanently. With all the commitments facing the country, expenditure on revitalising rail and road transport in a co-ordinated manner is imperative. It must be remembered that transport, like coal, is a vital defence requirement.

In discussing the part to be played by the railway engineer, Mr. Quartermaine assures us that every engineer wants to assist in wise planning and speedy execution of construction works to provide better, quicker and, if possible, cheaper service. By various methods he is achieving some success in overcoming the problem of labour shortage, but he seeks a far higher place in the queue for materials. His aims always are more economical design, use of materials and execution of works, better organisation of the labour available, constant research into improved methods, and the most effective use of mechanical equipment. The annual civil engineering bill for maintenance is over £50,000,000; to reduce this without loss of efficiency, staff with engineering training, experience, and ability of a high order is necessary. Structures wear out or become obsolescent, and have to be replaced by modern and more lasting ones; track, signalling, and formation have to be strengthened and improved. Reconstruction and modernisation are generally undertaken in such a way as to give the best and most durable results for the least expense in first cost and maintenance.

In repairs and replacement of bridges, the present need for conserving steel induces a greater use of pre-stressed or other reinforced concrete, but better materials and forms of construction are constantly being sought, with a view to economy in first cost and maintenance as well as long life. The necessity for speedy erection under traffic often affects design in the replacement of bridges. Tunnel repairs are usually due to deterioration of mortar and scaling of bricks in linings, but distortion of the arch or side walls has sometimes to be corrected by building new inverts or by complete relining. In the unusual event of further economic maintenance under traffic becoming impracticable in a particular tunnel, a new tunnel may be unavoidable, as at Woodhead, where the new bore, over three miles long, was begun in March, 1949, and the pilot heading completed in May, 1951. Engineers are always facing tunnel problems somewhere; recently there have been two instances of side walls settling and moving inwards. In one tunnel heavy inverting and relining were necessary, and in the other, complete opening out was the solution.

The serious drainage problems involved in the efficient and economical maintenance of the track are still the subject of experimental research. Clay formation is particularly troublesome in this respect, as it prevents the flow of water to the side drains. The slurry then rises up through the ballast and necessitates the removal of the track and digging out the mixed ballast and clay to a level at which the clay is undisturbed. On this new formation

"blanketing" is laid, usually in the form of 1 ft. or more of stone dust, rolled and tamped mechanically before coarser material graded upwards to the size of the ballast is laid over it. The ballast can then be spread and the track replaced. Meanwhile, the side drains must be renewed at a suitable level to draw off the water before it reaches the clay again. Other stabilising methods tried include cement grouting, sand piling, sand infiltration, and laying concrete slabs. Considerable lengths of track now require treatment because of neglect during the war and subsequent shortage of labour. Restoration of defective track formation and drainage cannot be deferred if better running and decreased maintenance costs are to be achieved.

Whatever means are used to make railways more efficient, it is essential for skilled engineers to carry out the work in a way which inspires their staff with confidence, enthusiasm, and pride of achievement. So that the best railway trainees shall not be attracted away from the service, care must be taken to watch that necessary centralised instructions and standards are not allowed to discourage the inception and development of new ideas among Regional staffs. The tendency is for the morale of good men on those staffs to be lowered by undue restriction on their initiative. Any idea that the railway engineer's work is lessening in interest and opportunities is wrong, and there must be no room for doubt that railway service is attractive as a permanent career. As an inspiration to young engineers, Mr. Quartermaine concludes his address by quoting a former President of the Institution, who, after the deaths of Brunel and Robert Stephenson, said: "We at least, who are benefited by their success, who feel that our Institution has reason to be proud of its association with such names as Brunel and Stephenson, have a duty to perform, and that duty is to honour their memory and emulate their example."

### Further Railway Regrouping in India

ON November 5 two more groups of railways in India were amalgamated to form two new railway systems serving specific zones and designated the Central and the Western Railways. Their aggregate route-mileages are given as 5,399, Central, and 5,423, Western. From the brief descriptions of these new railways embodied in an article in this issue, it appears that no hard and fast standard form of organisation, outside headquarters, has yet been adopted for the new systems throughout India. This is probably a wise policy, and only time will show what proves to be the most suitable regional or other method of organisation or, indeed, if standardisation in this respect is desirable. It will be noted that for the Central Railway it has been considered advisable to adhere to the quasi-divisional system developed on the Great Indian Peninsula Railway, wherein divisional control is in force only by Transportation Superintendents in charge of traffic and power, and the Engineering and Commercial Departments are organised on the district pattern. There is thus no question of Regions, each under three Deputies of Traffic, Engineering and Mechanical, working as self-contained individual units, as has been approved for the Southern and Western Railways.

On the new Western system, the pre-grouping district in all three departments have almost all been retained intact under the Regional Deputies, who evidently exercise considerable powers. It is not clear whether each Region is provided with its own Deputy Accounts Officer to advise the Regional Deputies. An interesting point to note in the table of administrative organisation of this railway is the interlocking of the Transportation and Mechanical controls. Except in so far as there is no officer—a Regional General Manager—responsible for every phase of work in the region, this new system closely resembles the old divisional system in force on the pre-Partition North Western Railway, and possibly still in Pakistan. The Divisional Superintendent was virtually a Divisional General Manager, with approximately 1,000 route-miles of line under him. The new system in India would seem to risk dissension between the Regional Deputies, even if the Transport-



tation or Traffic Deputy does dictate general policy. Apart from this possible risk, the regional—or self-contained divisional—system seems sound, and might well be adapted to the needs of many large railways outside India. Such decentralisation, with adequate powers entrusted to the man on the spot, has much to recommend it, if applied to a system of any route-mileage of over about 5,000 miles.

### The North Eastern Railway

THE North Eastern Railway was formed of the merger of the York & North Midland, York Newcastle & Berwick, and Leeds Northern companies in 1854, ten years after another important amalgamation which had produced the Midland. Unlike the Midland, however, which soon thrust out its tentacles into districts far beyond those which its title suggested, the North Eastern preferred to consolidate its position in a territory roughly corresponding with Saxon Northumbria, and so secure did it make itself that its monopoly was only once really threatened—and that by the somewhat chequered Hull & Barnsley.

In many respects the North Eastern was the strongest of the East Coast route companies. With its partners the Great Northern and the North British it worked well. It also exchanged important traffic with other lines—including the Midland, Great Central, Great Eastern, and Lancashire & Yorkshire. If its passenger side was lucrative and well looked after, it was by freight and mineral traffic that it really prospered, and it never lost sight of the fact. It developed a system of docks and staiths second to none in the country, was an early user of large wagons, and interested itself in North Sea shipping.

To the chief goods manager's office of this many-sided railway in 1898 came Mr. Robert Bell. He soon made his mark; when hardly forty he became Assistant Goods Manager and in 1922 Assistant General Manager, assuming the same position in the next year when the L.N.E.R. began, and continuing in that office until his retirement in 1943. Obviously, therefore, none is better qualified than he to chronicle the later days of the line; this he has now done admirably in a work\* which in his words "may go some way towards rounding off the old company's record." The first fifty years of the North Eastern up to 1904 have been described in detail in Tomlinson's "The North Eastern Railway—Its Rise & Development," brought out in 1915. Mr. Bell's account begins, like his own career, in 1898, when the undertaking was in an enviable position, with a growing number of stockholders, a strong board, and an assured and increasing traffic. He knew the great figures of the North Eastern—Gibb, Geddes, Edward Grey, Alexander Kaye Butterworth, and others no less eminent—and he shrewdly discusses their characters and capabilities. It is this evocation of personalities which makes the book of particular interest, though the author modestly refrains from mentioning his own long and distinguished service.

The North Eastern was always ready to release younger promising officers to take up posts elsewhere on promotion, proof of its healthy condition. In staff relations and welfare it held high place; for instance, in 1907 it pioneered the traffic apprentice scheme, and in 1911 extended facilities for staff education by inaugurating two-year instruction courses. It was the first main line to introduce electric traction—on the Tyneside suburban section in 1904—and in 1916 it equipped its Shildon-Newport mineral line for electric working. Plans to electrify the main line between York and Newcastle reached an advanced stage, and a prototype express electric locomotive was built, but the 1923 grouping put an end to the project.

The wartime activities of the North Eastern may have been insufficiently appreciated; 24,000 troop trains, 83,580,000 workpeople carried, and 5,500,000 tons of Government goods hauled are impressive totals which indicate the great effort made, recognised by the Government in the Railways Act of 1921 when, of the £60,000,000 credited

to all lines as compensation for wartime control, the North Eastern received about one-tenth. The total number of journeys originated rose substantially, despite the reduction of ordinary passenger services, yet punctuality remained remarkably good throughout the war.

After the war, Sir Eric Geddes, who had gone in 1915 to the Ministry of Munitions, severed his connection with the North Eastern finally when he was appointed the first Minister of Transport. It thus fell to his lot to conduct the negotiations which led to the Grouping and the winding-up of the company of which he had been Deputy General Manager. It is pleasant to record that the North Eastern enjoyed an Indian Summer; from 1919 to 1922 it did well, to the extent that a dividend of 7½ per cent. was declared each year, for the first time since 1883. It handed over to the L.N.E.R. a first-class property, and an honoured name, and few will quarrel with Mr. Bell's epitaph for it—"a great railway, run by men whose hearts were in their work."

### Colonial Transport Integration

UNREGULATED road transport in some of the smaller British Colonies is causing their Government railways to show annual deficits. In addition to the capital cost of these railways much money and technical skill has been expended on their maintenance, and operation. However small, they are a valuable property and should not be abandoned unless there is no other course open.

Mr. G. V. O. Bulkeley, formerly Director of Transport in Nigeria, in an article in a recent issue of our associated journal, *New Commonwealth*, suggests that the solution is the integration of all transport within the territory. The first move should be to require, under statutory regulation, similar maintenance standards and staff conditions on both road and rail. Private road vehicle owners should be required to bring every vehicle at three-monthly intervals to a prescribed centre for examination by inspectors attached to the police force. The proper maintenance of railway locomotives and rolling stock would meet the requirements of the law, following accepted standards carried out under a qualified engineer. Railway maintenance costs per 1,000 gross ton-miles should not be allowed to exceed the average figure for the larger colonial railways. Estimates for modernising older locomotives should be submitted and implemented.

Both rail and roadway track costs might be pooled, and both road and rail vehicles carrying freight pay an annual tax per ton of gross (loaded) weight for the use of trackway. This would reduce competitive factors to ton-mile working costs, and quality of service. The railway would certainly be encouraged fully to load its vehicles. A road surface equivalent in road operating standards to those governing railway track would be obligatory on busy routes.

Owners of road transport vehicles plying for reward, or conveying their own goods, should be required by law to form a Road Transport Association. A Transport Conference might then be established, with the following members: senior executive officer of the Government railway; the Director of Public Works; the Port & Marine Superintendent, and three members of the Road Transport Association. The Conference would have power to co-opt, in an advisory capacity without vote, the Chief Secretary and the Financial Secretary (or Treasurer), who, conversely, would be entitled to address the Conference at any time.

The Conference would have to consider transport integration; vehicle taxation; and licensing. The first would include vehicle and track maintenance, and staff conditions, including working hours. It should have an independent chairman—in the first instance, probably a man from outside the colony with exceptional experience in general transport problems; later, someone prominent in the colony, probably retired, would be nominated.

The minutes of the Conference would be submitted to the Governor. Unless he referred them back with a question or objection, they would be put into effect at once. The chairman of the Conference would not comment to the

\* Twenty-Five Years of the North Eastern Railway, 1898-1922. By R. Bell. London: *The Railway Gazette*, 33, Tothill Street, London, S.W.1. 7½ in. x 4½ in. 87 pp. Price 10s. 6d.

Governor on the minutes. Whatever he had to say would appear in the minutes. This would give the Conference wide executive power.

Mr. Bulkeley suggests that the title of General Manager of the railway might be changed to that of General Superintendent; he would supervise traffic and commercial affairs as well as overlooking the whole. There seems no good reason for this change, and the new title might well lead to a loss of status. On the technical side, one officer designated engineer, would take both civil and mechanical sections. The accountant would also supervise stores and purchasing. Supervision outside headquarters would be exercised by inspectors or foremen, according to the mileage and capacity of the system.

## Machinery of Joint Consultation

(By a Correspondent)

IT is significant that joint consultation, the solution propounded by the Whitley Committee in 1917 for the industrial problems of the 1914-18 war, is once more recognised as the principal hope of salvation for this country in its striving for increased productivity. The railways and the railway unions can claim that they jointly pursued this policy between the wars when other industries lost sight of it. To go no further back, the 1935 agreement on the "Machinery of Negotiation" stated as the object of the appointment of local representatives and of the establishment of local departmental committees, "to provide a recognised means of communication between the employees and the local officials of the railway company, and to give the employees a wider interest in their work and the conditions under which it is performed, with a view to the maintenance, development, and economical working of the railway company business."

Although questions of management were in general excluded there were certain exceptions which in effect left open a wide field for joint exploration. Thus local department committees were empowered to consider any suggestions referred to them concerning, among other things, staff accommodation, labour saving appliances, improvements in working methods, and organisation and measures intended to retain existing or secure new traffic. Similarly, sectional councils could consider, concerning the grades they covered, suggestions as to operating, working, and kindred subjects, and other matters in which a company and its employees are naturally interested, such as co-operation with a view to securing increased business, greater efficiency and economy, well-being of staff, and general principles governing recruitment and tenure of service.

On the face of it this procedure was capable of doing all that was required to promote "greater co-operation in the running of British Railways and good relations between management and staff in all grades and departments." Why, then, was a new and entirely separate consultation procedure set up in 1949 with precisely these objects? Whatever may have been the reasons which decided the Executive and the unions there is certainly one good reason for it. The old machinery had far deeper implications than any of the parties implicated seem to have realised. The subjects given above as eligible for discussion by L.D.C. and sectional councils are the very stuff of consultation as distinct from negotiation; there was nothing in the rules to prevent them being referred to higher levels, similar to negotiation questions; and it was specifically provided that those not disposed of by a sectional council might be referred to union headquarters, and then lastly to the Railway Staff Conference.

Now it is plain that if such questions, which, being outside the scope of negotiation, are for the management to decide, can be referred to higher levels of consultation, the decision is effectively taken out of the hands of the management, or at the best can only be exercised after long delay. The issue then becomes one of staff participation in management and the wonder is that under the old procedure it never came to a head in those terms.

Whatever may be the case for, and against, the staff being given a share in the functions of management, the Railway Executive certainly had no choice but to retain in its own hands the final decision in matters for which it is responsible under the Transport Act. If joint consultation was desirable, as in the interests of productivity it is generally held to be, the procedure on the railways had to be distinguished from that of the negotiating machinery, and reference from lower to higher levels excluded.

Whether it was wise in these circumstances to specify as "desirable that the representatives of the staff to take part in consultation should be the representatives elected to the various bodies within the agreed negotiating machinery" is another matter. There was an obvious risk of importing the atmosphere of negotiation into joint consultation. On the other hand, one cannot consult the whole staff, and to fulfil the spirit of the procedure it is necessary to consult their elected representatives. There would be administrative difficulties in arranging separate elections for consultation purposes and it would not be easy to find still more men willing to serve as staff representatives. For the time being, doubtless, existing representatives must carry the double burden of negotiation and consultation in addition to their other duties, but it is to be hoped that one of the effects of joint consultation will be so to stimulate the interest of the staff in general as to make it possible to provide separate representatives for either purpose.

In the present economic position of the country there will be a general desire to get the best out of joint consultation, and until the procedure becomes firmly established the management must in many cases take the initiative. There has always been on the railways consultation of an informal nature at all levels and outside the negotiation machinery, and there was consequently a risk that the issue of the directive on consultation in 1949 would be regarded as little more than a rubber-stamping of existing custom. Nothing could be further from the truth. There is all the difference between informal consultation with individuals, who may have a special contribution to make, to the solution of any particular problem and consultation with the staff in general through their elected representatives, especially as the staff themselves have through their unions claimed and established a right to be consulted.

It is also important that the position of staff representatives should be clear. They have in many directions to separate the objective merits of the case under discussion from their own immediate interests and those of their fellows; they are required to state their views on both. It is not easy, even for a trained thinker, to achieve complete objectivity of mind, and the effort required in this way, to say nothing of the absorption of a good deal of leisure time, must be credited with full value. One problem which has received much attention is the position of supervisory staff. Ordinary methods of consultation tend to by-pass the supervisor who is thus threatened with a loss of status unless he can be made to feel that he knows what is going on and that he can make his own contribution to the solution of current problems.

Doubtless it is with this in mind that the general procedure on the railways provides that members of certain grades who "by reason of their responsibilities as local officials of the management cannot be embraced by the procedure for consultation at local levels . . . will be brought into consultation by their District Officers in regard to matters directly affecting their local areas of responsibility." It will readily be agreed that such recognition of the importance of supervisors is essential to the success of the consultation procedure as a whole, but there should equally be no omission on the part of local officials below the level of District Officer, themselves in charge of supervisory grades, to keep their own supervisors at least as fully in the picture as the representatives of the staff whom they consult more formally under the agreed procedure.

Finally, the progress of the consultation procedure is perhaps sufficiently widely known at the top and the bottom, but what is happening at intermediate level is less well publicised, and one would like to see the whole question given the prominence it deserves by the British Transport Commission in its next annual report.

## LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

### Transport Integration

October 27

SIR,—Mr. A. Ralph Wilson ought to be careful, when criticising published writings, to be sure that he attributes to his victim something he has said. In my letter of September 1, I did not allege ignorance. To say that an anonymous writer indicates by what he says that he knows little or nothing of the railway rates and charges and commercial structure is far from alleging that he is ignorant in a general sense. Otherwise, everybody would be ignorant except the comparatively few people who do understand those things. Without disparaging in any way Mr. Wilson's qualifications in his own sphere, I would certainly never put him in the latter category.

On the other hand, when he says that costs per vehicle cannot be determined accurately for a given journey, he is talking nonsense about something he ought to know better, and saying that something which is being done every day cannot be done. If he were really modest, what he ought to have said was simply that he did not know how to do it. I chose my words carefully, and used the term "a given journey" to mean a journey with all the relevant facts known in advance. What he means in his last paragraph is that he cannot answer the points I make, and he runs away and takes refuge in references to rhetoric, without ascertaining the meaning of the word.

Yours faithfully,

FREDERICK SMITH

65, Hallowell Road, Northwood

### L.M.R. Outer Suburban Services

November 2

SIR,—One sometimes wonders whether the Railway Executive is really interested in maintaining its revenue nowadays; certainly one would not think so from appearances. Not only is there a lamentable lack of any real desire to obtain traffic that should rightly be its in the form of reasonable fares and an attractive service—both necessary attributes—but one finds evidence of measures calculated, intentionally or otherwise, actually to drive it away.

The latest gem in the latter category is to be found in the sudden withdrawal on October 29 of the 9.32 a.m. Tring-Euston train, the only service by which passengers from stations between Tring and Kings Langley can, or, I should say, could, reach London on a cheap day ticket before midday. It may seem almost incredible that an important main line out of London should have no morning service to London between 8.49 a.m. (from Berkhamsted for example) and 11.26 a.m. yet an examination of the current timetable will show this to be the case now that the 9.38 a.m. has been cut out.

We now have the extraordinary situation of two trains within three minutes of each other, at 8.46 a.m. and 8.49 a.m., one to Broad Street and one to Euston, both much too late to be of use to any but a small proportion of

season ticket holders, yet too early in view of the arbitrary and apparently inviolable 9.30 a.m. restriction to be available to cheap day ticket holders, and not another train for 2½ hr.! Any step more calculated to drive traffic to the roads could hardly have been devised, and traffic once lost is difficult to regain these days, although the powers that be do not seem to realise this.

The fact that it is hardly possible to prune our poor, emaciated out-of-business-hours service at all without shutting up shop completely between 9 a.m. and 4 p.m. merely emphasises once more the very shabby treatment which has been meted out to this section of line, the present Cinderella of outer London suburban services, ever since the war, and this on the former L.N.W.R., the once self-styled Premier Line!

Granted the necessity of conserving labour and engine power at the present time, one could at least have hoped for it to be applied with a modicum of commonsense. Such shortsightedness as this must be a cause of despair to all who have the interests of the welfare of our railways at heart.

Yours faithfully,

H. C. CASSERLEY

Ravensbourne, Berkhamsted

### Railway Freight Rolling Stock

October 1

SIR,—In his paper before the Metropolitan Section of the Institute of Transport on February 5, 1951, and summarised in your November 2 issue, Mr. S. E. Parkhouse, Chief Officer (Operating), Railway Executive, stressed amongst other things the relative advantages and disadvantages of continuous brakes on rolling stock.

I was much interested to note that although he mentioned the great value in terms of saving of freight engine hours, more punctual running, saving of work (and thereby staff) in control offices which would accrue, he made no mention of the saving of train crews, which would occur through the reduction in unproductive time.

The statistics produced in respect of unproductive time of enginemmen in particular show that at many depots the figure is as high as 40 per cent. and much of this time is due to the fact that because of the slow speed of loose-coupled trains "out and home" working between the main marshalling yards cannot be effected. This has been aggravated in recent years by the eight-hour working day.

In view of the prominence which has been given to the question of saving of staff and increased productivity it is surprising that such an authority as Mr. Parkhouse should not have specially stressed this apparent advantage, and it would be helpful if his views on this aspect of the matter could be published.

Yours faithfully,

E. J. MURPHY

221, Devonshire Road, London, S.E.23

### Publications Received

*Wheels Round the World*, by Alan Hess. London: Newman Neame Limited, 50, Fitzroy Street, W.1. 9½ in. × 7 in. 94 pp. Illustrated. Price 15s.—Beginning with Dr. Lehweß's unsuccessful attempt to encircle the world in 1902, this account of long-distance expeditions by motorcar, relates the experiences of those pioneers who followed him in the quest to open the roads of the world to the ordinary motorist. Although the age of this type of ex-

ploration was ending by the early 1930's, the age of record breaking had begun and here there is an equally interesting story to tell, which culminates in the author's journey this year round the world in 21 days.

*Diesel Engines for Industry*.—Three leaflets describing the features of a range of 2-, 4-, and 6-cylinder industrial diesel engines have been issued by Sentinel (Shrewsbury) Limited. These are illustrated by photographs and general arrangement diagrams show-

ing outside dimensions. There are also useful technical data, such as compression ratio and rated output.

*Flameproof Lighting Fitting*.—A description of a flameproof lighting fitting is given in an illustrated leaflet (L608/A) issued by Victor Products (Wallsend) Limited. This equipment provides several new features, including a cowl in the top cover to prevent the entry of water at the flange, and it is rated at 300 W. up to 250 V. The fitting is constructed of aluminium.



## THE SCRAP HEAP

### To Remember Them

Before the trams running at Camberwell Green are replaced by buses, they are to be painted by an artist commissioned by the Camberwell Libraries Committee.—From "The Evening News."

### Sit Down Strike

A society for the Welfare of Exhausted Young Mothers is being formed at West Wickham, Kent, because children will stand and look at trains. Women who join the society will petition Beckenham Council to put seats on the bridges. All the members of the society want is one seat at each of two bridges. When they have got them the society will stand down.—From the "Daily Express."

### Railway Horses Retire

Five more British Railways horses from Bricklayers Arms have been purchased by Our Dumb Friends League so that they may end their days on the land. So far, 17 horses have been purchased at a cost of £844, subscribed by the public for this purpose, and they have been acquired under an arrangement whereby British Railways first offer their redundant horses to the League for purchase.

### Two-Horse Traction

A photograph recently published in the *Cornishman* showed two carthorses "Prince" and "Punch" drawing a wagon at Hayle, Cornwall. "For over 100 years horses have pulled railway trucks to a siding at Hayle," stated the newspaper. A reader subsequently wrote that the horses are 11 years old and work round the docks at Hayle every day. "They are the only horses working for the railway this side of Bristol. Sometimes they have pulled as



[Reproduced by permission of the proprietors of "Punch"]

much as 300 tons of coal a day. The time is coming when they will be replaced by a tractor, but I hope it will be a year or two."

### Trunk Call

Passengers at Ely Station were startled when a goods train from Harwich drew in and they saw seven elephants' trunks waving from a damaged truck. Seven young elephants were on their way to Wolverhampton and the train had stopped to repair the damage they had caused.—From the "Daily Mail."

### Long-Lost Property

May I humbly lay claim to the possible distinction of being the only person who has ever lost anything in the lost property office? Many years ago I left my umbrella in a London tram. I called at the lost property office the next day, recovered the umbrella, to my great surprise and gratification, and departed jubilantly, leaving my brief case on the counter.—From a letter to "The Times."

### Seeing the Guy

Special bus excursions were run by London Transport to bonfire celebrations at Edenbridge, Kent, on November 3, and at Lingfield, Surrey, on November 5. Thousands of spectators visited Edenbridge which claims that its town bonfire and Guy Fawkes celebrations are the largest in Britain.

### Southern Region Surprise

A startled traveller arriving from Salisbury rode without knowing it behind the latest Southern Region diesel-electric locomotive and was mystified to observe signs of interest and enthusiasm at every station. Having noticed that numerous phlegmatic railwaymen were gathering beside the track, waving at the train, and behaving in a generally demonstrative manner, he concluded that it carried a person of eminence and fame, whereas the fame belonged to the powerful black machine which drew it, called 10202.—From the "Manchester Guardian."

### Railway Photographs for Museum

A correspondent writes that Mr. R. P. Grenfell, shortly retiring after 47 years on the railway, performed his last public duty as stationmaster of St. Ives, Cornwall, when he handed over to the St. Ives Museum photographs of two famous Great Western locomotives, *Cornishman* and *Tregenna Castle*. They were the gift of Mr. K. W. C. Grand, Chief Regional Officer, Western Region, British Railways, who was approached by the Town Clerk, after an exhibition staged by the St. Ives Old Cornwall Society last year. Mr. Grenfell pointed out that the *Cornishman* was built in 1896 for passenger service

on the severe gradients of the West Country and by the time it was withdrawn in 1936 had covered 1,290,650 miles.

### Rails into Razors

A recent account of the closing and dismantling of a railway line in Canada included a tribute to the steel rails which were laid between 1884 and 1888 and declared to be almost as good as the day when they were put down. They were made in Sheffield and at no time during their 65 and more years of service had a break been reported. According to a correspondent the steel is so fine that a Canadian National Railways official has said that it would be sold to razor blade manufacturers.

### An Unusual Accident

While travelling in a train between Karachi and Hyderabad some time ago, a soldier entered a lavatory in an inter class compartment. He was never seen coming out. After a long delay, on forcing the door open it was discovered that the floor of the lavatory had crashed down, throwing the soldier in between the rails. The alarm chain was pulled and the train was backed. The Hyderabad Civil Hospital bears testimony to this sad story in its records.—From a letter in the Karachi newspaper "Dawn."

### The Jargonauts

The glories of our native tongue  
Once held the world in thrall,  
But, harnessed to some pedant's whim,  
We'll soon forget them all.

Whence come these base, ignoble terms  
That pester us of late —  
These cacophonic syllables,  
For instance "denigrate"?

If I complained to Porter Bill,  
Thus-wise, and made a mock of  
Some trifling understress of zeal,  
No doubt he'd knock my block off!

We've suffered much from jargonese  
Since nationalisation,  
Can this be some Whitehall disease  
That permeates the nation?

The red-tape mind, obsessed by dread  
Of silly possibilities,  
Instinctively turns for relief  
To polysyllabilities.

In days of war, I recollect,  
One master mind rebutted  
This jargonistic tendency  
And up with it not putted!

So, let us guard our heritage,  
Drop with a battle-axe on  
These portmanteau monstrosities  
And stick to Anglo-Saxon.

A. B.

## OVERSEAS RAILWAY AFFAIRS

(From our correspondents)

### RHODESIA

#### Financial Results

Revenue during the first quarter of the current financial year amounted to £3,272,453, and expenditure £2,649,221. The surplus of £623,232 was £84,607 higher than the comparative figure for last year.

#### Traffic Statistics

Passengers carried during the quarter amounted to 630,091 (63,801 more than last year) and the total tonnage was 1,643,056, 185,239 tons more than in the same period last year.

#### Direct Link with Lourenço Marques

The Southern Rhodesia Government has published an official notice reserving against prospecting and pegging a strip of land 500 yd. wide extending from Bannockburn to the Portuguese border, the contemplated route of the proposed rail link with Lourenço Marques via Pafuri.

This is a precaution to safeguard the Government against claims from new mining block owners who would have to be compensated should the Government ultimately decide on the south-east rail link.

The final decision awaits the report of a team of American consultants who have made a survey of alternative routes.

### CANADA

#### Gas Turbine Locomotive

An experimental coal-burning gas turbine for locomotives will be ready to test next March, Professor Donald L. Mordell, director of the McGill University gas dynamics laboratory, has stated. He said the \$100,000 engine being built by the University under a contract with the Federal Government is the first step in a series of experiments designed to find an economical engine for Canadian railway operations. According to calculations, the engine, burning coal dust, should travel four times as far as present steam locomotives on the same amount of coal. The fuel costs are expected to be only one-third as great as those of diesel engines.

### ARGENTINA

#### Distinctive Liveries Abandoned

Distinctive colour schemes for the principal expresses are being abandoned as a general practice on the grounds of economy, and a light brown colour is being adopted as standard for passenger coaches, compared with the darker brown previously used on most lines.

#### Increased Services

The General Belgrano Railway has replaced the Buenos Aires suburban services operating over the former Midland and former C.G.B.A. lines by one-class trains hauled by Westinghouse

diesel locomotives, and by Ganz-diesel trains, thus bringing them into line with those operating over the former Central Córdoba line. The number of trains has been increased, and a new station opened at Ciudad Evita, the model township named after the wife of the President. The mixed trains between Santa Fe and San Javier have been replaced by diesel trains, and a new diesel service has been provided between Santa Fe and San Cristobal. On the General San Martín Railway, an additional service worked by Ganz diesel railcars has been introduced between Mendoza and San Juan.

#### Suburban Rolling Stock

The General Belgrano Railway has completed five one-class all-metal passenger coaches in its Tafi Viejo works. These coaches, which seat 76 passengers, now run on the suburban service between Puente Alsina (Buenos Aires) and Ciudad Evita.

### IRELAND

#### Pilgrimage Traffic

The total number of pilgrims to Lough Derg, for the year which ended on August 15 last was 32,554, an increase of 1,591 on the previous year's record. Of these 18,803 travelled by the G.N.R.(I.) railway services, as well as hundreds who travelled by G.N.R.(I.) road services from the West via Sligo, and from the districts around Pettigo.

Nearly every weekend organised parties of pilgrims travelled from Dublin by the "Bundoran Express" to Pettigo whence G.N.R.(I.) buses conveyed them to the Lough shore. The "Bundoran Express" runs non-stop between Clones and Pettigo, making a substantial reduction in time taken for the journey

from Dublin, and cutting out Customs examination at the boundary stations through which it passes. The total bus mileage between Pettigo and the Lough Derg shore during the season amounted to over 9,000. In addition to pilgrims travelling by the "Bundoran Express," others travelled from stations on the G.N.R.(I.).

### FRANCE

#### Paris Transport Results

Passengers conveyed by the Paris Transport Board (Régie Autonome des Transports Parisiens) totalled 1,978,000,000 in 1950, 30 per cent. more than in 1938, but below that for 1949 (2,105,000,000). In 1950 there were 1,130,000,000 Métro passengers, compared with 1,247,000,000 in 1949, and 761,000,000 in 1938.

During the first nine months of this year combined bus and Métro traffic varied little from that in the same period of 1950. The increase in fares as from January 30, 1950, with savings from rationalisation of the services produced a working surplus of fr. 389,997,352 in 1950, the first since 1914. This surplus, in addition to wiping out the working deficits of former years, enabled a credit balance of fr. 1,944,334 to be carried forward. The number of persons employed fell to 34,181 from 34,490 in 1949.

The decrease in passengers in 1950 is believed to have been partly the result of higher fares and partly to many travellers using private means of conveyance, a development encouraged by strikes on the Métro and buses. A comprehensive programme of modernisation evolved proposes an expenditure of fr. 11,700 million (approximately £11,938,000) to be spread over five

#### Diesel Train Services in Argentina



Eight-coach diesel train formed of two four-coach Ganz sets, running on the General San Martín Railway, Argentina

years. A number of Métro lines will be extended into the suburbs and 100 trains are to be ordered; 1,900 new buses are to be placed in service. Deliveries of the trains and buses are to be spread over seven to eight years.

#### "Europe Train" in Paris

After a tour of six months through Denmark, Norway and Western Germany, the "Europe Train," organised by the Organisation for European Economic Co-operation, recently arrived in Paris. It was transferred from the railway at Montrouge Station on to vehicles specially designed for the transport of railway rolling stock by road and operated by a subsidiary (S.C.E.T.A.) of the S.N.C.F. The seven coaches were conveyed by night through the streets of Paris to a temporary track laid to receive them on the Esplanade des Invalides.

Five of the seven coaches contain exhibits illustrating European resources in industry and science, and the benefits of European co-operation; the other two are reserved for motor equipment and the accommodation of 12 persons travelling with the train. During its tour the train has travelled more than 4,000 miles and before arriving in Paris was visited by nearly 2,000,000 people. The stay in Paris was from October 12 to 28. The train is to visit other French cities and later Italy and Switzerland.

#### Freight Rates Increased

Freight rates on the S.N.C.F. were raised by 5.127 per cent. on November 1. Passenger fares remain unchanged. The Minister of Public Works & Transport, addressing the Parliamentary Finance Committee, said the increased rates would apply to all goods traffic without exception. The increase would result in an estimated rise of fr. 12,000 million (about £12,000,000) a year in the railway receipts. Passenger fares on the Paris Métro and bus systems would remain unchanged, as the balancing of the budget for the R.A.T.P. (Régie Autonome des Transports Parisiens) now seemed assured for 1952.

The financial outlook for the S.N.C.F. in 1952 appears less satisfactory, according to an article in *Le Monde*. The Pinay plan for the reorganisation of rail and road transport and S.N.C.F. financial reforms were debated when Parliament reassembled on November 6, but even if the plan is adopted before the end of the year, it can achieve results only in time. Meanwhile for three or four years at least, increasing deficits must be faced. For 1952 it is estimated at fr. 150,000 million (about £150,000,000). At the same time there must be further expenditure on electrification and purchase of lightweight rolling stock as envisaged by the reforms in the plan. To improve the financial situation increased government subsidies are needed. The alternative is a rise of 30 per cent. at least in railway tariffs which would benefit road rather than rail traffic.

## CZECHOSLOVAKIA

### New Danube Bridge

A new bridge crossing the Danube south of Bratislava, replacing a temporary structure built by the Soviet army in 1944, was opened on October 12. It carries the single-track standard-gauge line from Bratislava towards the south into Hungarian territory, connecting at Hegyeshalom with the Budapest-Győr-Vienna main line. Although the bridge is near the town the railway reaches it from the main station after a wide detour. Close to the southern end of the bridge is Bratislava-Petrzalka Most (bridge) halt, followed, some 1½ miles further south, by Bratislava-Petrzalka frontier station; the line continues for 8½ miles within Czechoslovak territory to Cunovo, close to the Hungarian frontier. Rajka is the first station on the Hungarian side, 7½ miles from Hegyeshalom.

## AUSTRIA

### Rates and Fares

Federal Railways rates for wagon-load and bulk consignments were increased several times in 1950, but those for "smalls" were left unchanged with a view to road competition. Passenger fares were not raised, mainly from social considerations, until September, 1951, when they were slightly increased.

At present, the indices for wages and prices compared with 1937 are two-and-a-half to three times greater than the fare index (195). The General Manager of the Federal Railways stated recently that every railway ticket sold was subsidised.

### Federal Railways in 1950

Traffic on the Federal Railways in 1950 continued to expand, though much more slowly than in 1949. Train-kilometres increased only 8½ per cent. over 1949, in which year they were 24 per cent. above the total for 1948. Passenger train-kilometres increased slightly against a decrease in goods train-kilometrage.

The steady decrease in the number of passengers since 1948 came to an end in the Spring of 1950, and the total for 1950 rose to 115,000,000 from 111,700,000 in 1949. Goods tonnage rose slightly to 35,900,000 tonnes from 34,500,000 in 1949, despite a decline in transit traffic.

### Higher Working Deficit

Although the working receipts rose to Sch. 2,252,000,000, from Sch. 1,723,000,000 in 1949 they were far below the working expenditure of Sch. 2,524,400,000 (Sch. 1,987,100,000), and there resulted a working deficit of Sch. 272,400,000, or 3 per cent. more than that for 1949.

The extraordinary expenditure of Sch. 506,500,000 was some Sch. 10,500,000 below that for 1949. In this, reconstruction accounted for Sch. 286,200,000, electrification for Sch. 209,400,000, and other investments for

Sch. 10,900,000. The total loss, therefore, was Sch. 778,900,000, slightly less than that for 1949.

## EASTERN GERMANY

### Dismantling Little-Used Lines

Following the suspension of all rail and road traffic which is considered "unimportant from the economic point of view," as reported in our October 12 issue, an order from the General Railway Management provides for the dismantling of all little-used lines in Eastern Germany, to enable the permanent way and other material to be used for main lines.

## WESTERN GERMANY

### Boiler Explosion

The boiler of a locomotive hauling a freight train blew up on October 12 while the train was running between Klotten and Cochem on the Moselle River line which runs from Koblenz to Trier. The cause of the explosion, the second in three months, is not yet known.

The driver and fireman were severely injured and were taken to hospital, where the fireman died. The locomotive and eight heavily-laden coke wagons were severely damaged and blocked the line. The Moselle road, which runs parallel to the railway, was also blocked by the large quantities of coke that fell on it.

### Diesel-Electric Crane

For the reconstruction of large-span bridges the Federal Railways have placed in service an unusual diesel-electric locomotive crane with a jib 115 ft. long. It can lift 30 tons at a distance of 66 ft. beyond the buffers of its 20-wheel carriage. Its packings when in use for lifting are of a size to allow the crane to work on one line of a double-track section without interfering with traffic on the other line.

With loads limited to seven tons the crane can revolve through 360 deg., and 30-ton loads can be lifted from adjacent tracks. Maximum hoisting height is 26 ft. above rail level. When in the running position, one bogie and two four-wheel dummies are required beneath the jib, lowered to the horizontal. The complete unit, which is 156 ft. long, may work in goods trains, running at up to 40 m.p.h., and can negotiate curves of 500-ft. radius. The normal counterweight is of 24 tons, but this can be reinforced as required. Power is derived from a 45-h.p. two-cylinder diesel engine driving an 18-kW. generator.

## SWEDEN

### Indian Coal Imported

Of a test consignment of some 5,000 tonnes of Indian coal which recently arrived at Trelleborg the State Railways took over 2,000 tonnes for experimental use in locomotives. If the experiments are successful more locomotive coal is to be imported from India. Before the war coal was imported from Great Britain and Germany.



# Inauguration of Indian Central and Western Railways

*A further important stage in the regrouping on a Regional basis of the systems of the Dominion*

IN his speech inaugurating the Southern Railway and zone of the Indian railway system on April 14, 1951, and recorded on page 489 of our May 4 issue, Mr. N. Gopalaswami Ayyangar, Minister of Transport & Railways, announced that two more new railways would be inaugurated within a year. This event has now taken place and the Central and Western Railways were officially inaugurated by the Minister on November 5.

## Central Railway

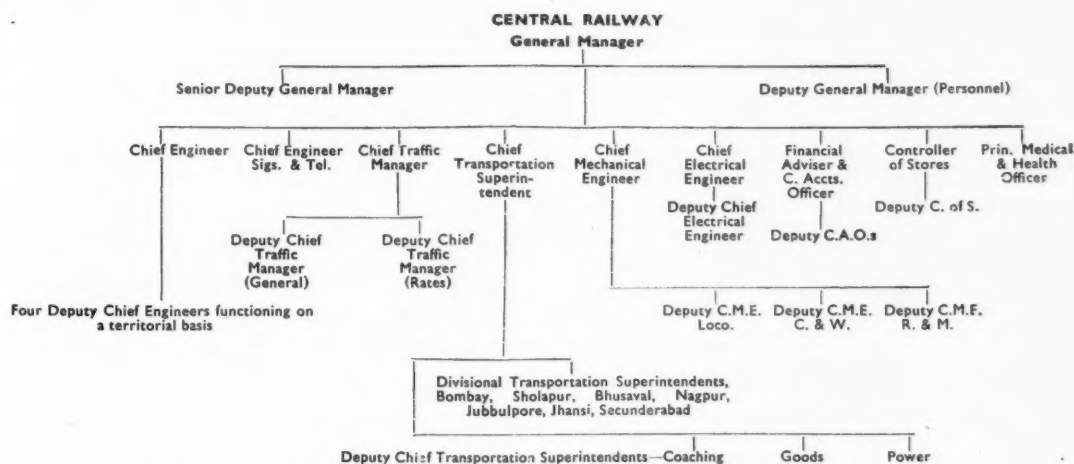
The Central Railway is composed of an amalgamation of the former Great Indian Peninsula, Nizam's State, Scindia State, and Dholpur State Railways. The Central zone served by it embraces the entire State of Hyderabad, the central part of the State of Bombay, most of the States of Madhya Pradesh, Madhya Bharat, and Vindhya Pradesh, and the lower portions of Uttar Pradesh. As well as Bombay, there are industrial concentrations of major industries in

As the G.I.P.R. is the most important system in this zone, its quasi-divisional system of organisation is being retained initially, with the Scindia and Dholpur narrow-gauge systems merged in the Jhansi Transportation Division, though forming a separate Engineering District. For the first six months or so, the N.S.R. will continue to function as a separate unit under Central Railway control, but thereafter it will become a single Transportation Division under a Superintendent. For commercial working it will constitute an additional Commercial Division under a Divisional Traffic Manager as in the six divisions of the former G.I.P.R. On the engineering side, the old N.S.R. Headquarters Districts will be abolished, but the remaining three districts will be retained as Engineering Divisions as on the G.I.P.R. The Central Railway will thus have 12 Engineering, 7 Transportation and Mechanical Divisions, and 7 Commercial Divisions, and the corresponding appointments will be as shown in the accompanying table:—

scope for economy will be progressively larger as the whole system begins to function as an organic unit.

## Western Railway

In the final grouping to form the Western railway, important modifications were made in the tentative layout proposed in 1950. To avoid forming a new headquarters for the then-suggested entirely metre-gauge system—as none suitable existed—with its extensive buildings and transfers of staff, and also to meet the wishes of the Gujarat business community, it has now been decided to incorporate the whole of the broad-gauge system of the Bombay Baroda & Central India Railway in the Western Railway. On the other hand, the Jodhpur and Bikaner Railways have now been omitted from the Western and transferred to the future Northern Railway. Meanwhile, adjustments have still to be made in the inclusion and exclusion of metre-gauge connections in the Delhi, Agra and Kanpur areas. The principal exclusions are the



Sholapur, Poona, Satara, Nagpur and Hyderabad served by this new railway, which carries large quantities of cotton, oil seeds, manganese, coal, mica and asbestos. The amalgamation of the G.I.P.R. and N.S.R. gives the latter a natural outlet to the west coast. The total route-mileage of the Central Railway is 5,339, of which 4,091 miles are 5-ft. 6-in. gauge, 744 miles metre gauge, and 564 miles narrow gauge.

The Central headquarters organisation is at Bombay; all administrative work formerly carried out at Secunderabad, Gwalior, and Dholpur is transferred to join that of the G.I.P.R. at the new headquarters. In this way a considerable number of previous headquarter appointments is being abolished.

In addition to the economies at headquarters resulting from the reduction of staff, the following others are expected to be realised from: (1) the elimination of dual control at the former G.I.P.R.-N.S.R. interchange junctions, Wadi and Balharshah; (2) a saving in rolling stock by running through broad-gauge trains beyond these junctions, for instance, Poona-Bezwada and Raichur-Bezwada; (3) a general reduction of staff in the Inspectors' cadres and in the Accounts Department; and (4) workshop repairs redistribution; and (5) standardisation of stores and stock.

Only comparatively small economies can be expected in locomotives as none is possible on the two isolated narrow-gauge lines, and the N.S.R. has a good record of economic use of power. The

B.B.C.I.R. metre-gauge Delhi-Rewari, Rewari-Fazilka, and Achnera-Kanpur sections from the Western Railway, but they will not take effect immediately. This leaves the Western Railway with the following route-mileages:—

	Railways	Miles
Broad gauge ...	B.B.C.I. ...	1,266
Metre gauge ...	B.B.C.I. ...	1,691
	Saurashtra ...	1,202
	Rajasthan ...	197
	Jaipur State ...	275
	Total ...	3,365
Narrow gauge ...	B.B.C.I. ...	652
	Saurashtra ...	140
	Total ...	792
	Total, all gauges ...	5,423

The equipment of the new railway will include 1,169 locomotives, 2,449 coaches, 162 motor and trailer coaches,



*The Central and Western Railways of India*

and 21,117 wagons. To retain the advantages of the existing District Organisations of both the B.B.C.I. and Saurashtra Railways and adjust them to suit a regional organisation, the following Regions have been fixed:—

- (1) Broad gauge, or Bombay, Region, with headquarters at Bombay, including also the narrow-gauge lines.
- (2) Northern metre-gauge Region, with headquarters at Ajmer.
- (3) Southern metre gauge (Saurashtra) Region, with headquarters at Junagadh.

The headquarters organisation of each Region is similar to

that adopted for the Southern Railway. At Regional Headquarters there will be three Regional Deputies of junior administrative rank, dealing respectively with traffic, mechanical, and engineering matters. Financial and other powers delegated to them will enable them to exercise administrative supervision and authority over the several districts in their charge, and so relieve Heads of Departments at headquarters by decentralisation. To ensure co-ordination at regional level the Regional Deputies in each Region will have a common office divided into eight sections: Transportation, Commercial, Way & Works, Power & Equip-

ment, Stores, Accounts, Establishment, and Budget.

The handing over of the Achnera-Kanpur, Rewari-Fazilka, and Rewari-Delhi sections will involve the transfer of two Traffic, two Engineering and one Mechanical district to other zones. There are left in the Western zone the following districts under each Region:—

	Engineering	Traffic	Mechanical
Broad gauge ...	6	6	4
Ajmer (Northern) ...	4	4	3
Saurashtra (Southern) ...	3	3	2

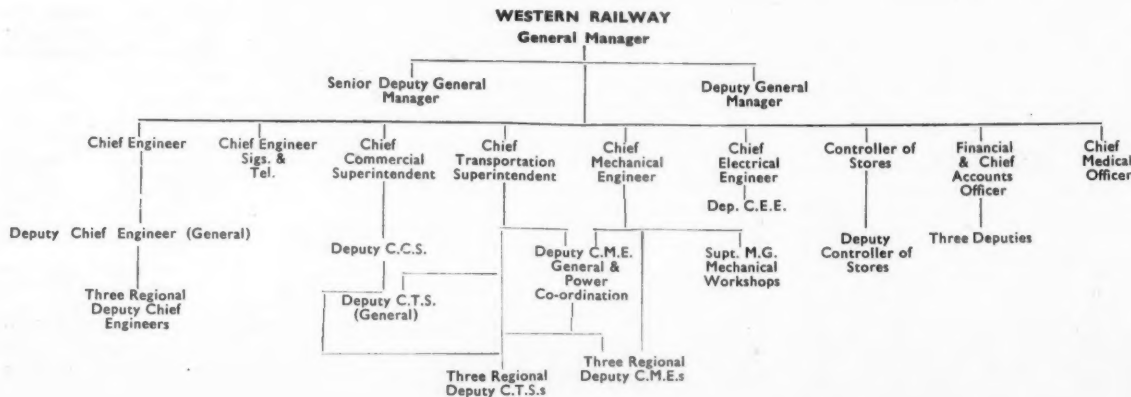
These districts are mostly as before grouping, though some readjustment has made possible the abolition of 4½ pre-grouping districts.

#### Headquarters Organisation

Some 31 administrative posts will be abolished by the elimination of four former headquarters and the centralisation of management at Bombay. The administrative organisation of the Western Railway is shown in the table at the foot of this page.

Apart from an expected saving of about £13,500 annually in salaries due to reductions in staff, the integration of the constituent units will permit of extended engine runs and better use of engines and staff, and also release engines and rolling stock. A better train service, for which there is a demand, will thus be possible. The full benefits of these changes will only be realised when actual working conditions are in force. The abolition of five interchange points will improve operational efficiency and save mechanical interchange staff. It is expected that re-arrangement of engine turns will enable some of the smaller sheds to be abolished. A considerable saving in accounting staff is also envisaged. Some aspects of types of organisation are discussed in an editorial article.

**SILENTBLOC LIMITED.**—The directors of Silentbloc Limited have declared a special interim dividend of 1½d. a 2s. ordinary share out of the amount set aside for such purpose at May 31. This distribution is equivalent to 2d. a share on the capital before the recent 50 per cent. bonus issue. For 1950-51 a total dividend of 29½ per cent. was paid on the pre-bonus capital.



## Freight Locomotives for Uruguay

*Oil-burning engines having a light axleload in relation to power*

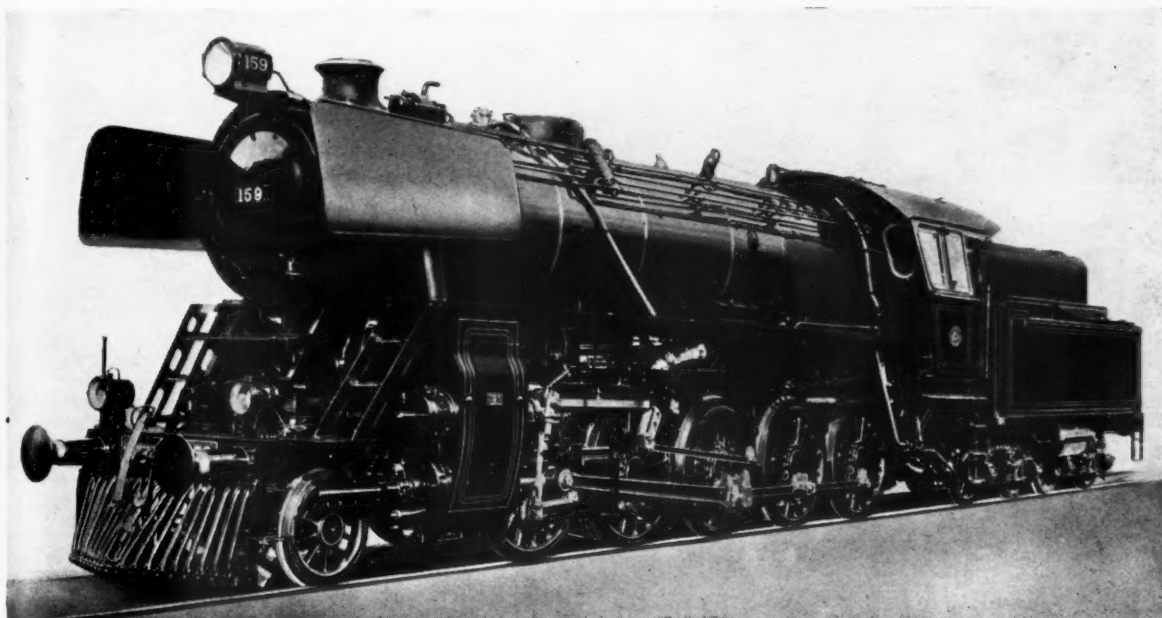
**A**N excellent combination of European and American locomotive practice is to be found in a batch of five oil-burning 2-10-0 freight locomotives delivered recently to the Central Uruguay Railway by Henschel & Sohn G.m.b.H., Kassel. Of standard gauge, they have the characteristic of all C.U.R. main-line locomotives of a very light axleload in relation to their power, the limit in this case being 14 metric tons, a weight borne by each of the five coupled axles.

To enable curves of 120 m. (395 ft.) radius to be traversed, only the second

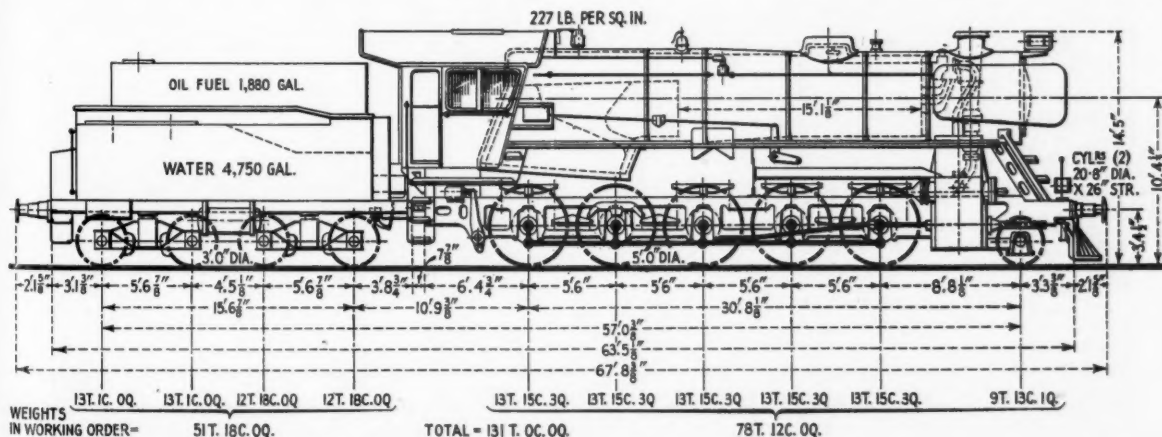
and third pairs of coupled wheels are rigid, and the third, or driving, pair has thinned flanges. The leading pair is allowed lateral play of  $\pm 30$  mm., the fourth  $\pm 17$  mm., and the fifth pair  $\pm 25$  mm. That more or less completes the physical limitations, for the loading gauge is generous and permits a height of 4.392 m. (14 ft. 5 in.).

This height enables the boiler to be pitched 3.15 m. (10 ft. 4½ in.) above rails and be given a firebox of adequate depth with the foundation ring above the wheels. The barrel is tapered and has a maximum diameter of 1.7 m. (5 ft.

7 in.). Distance between tubeplates is 4.6 m. (15 ft. 1 in.) and there are 28 superheater flues and 118 smoke tubes. Evaporative heating surface (fireside) is 129 sq. m. (1,386 sq. ft.) from tubes and flues plus 21 sq. m. (226 sq. ft.) from the combustion-chamber firebox and its two thermic syphons, or 150 sq. m. (1,612 sq. ft.) total. Grate area is 3.9 sq. m. (42 sq. ft.) and superheating surface 53.6 sq. m. (577 sq. ft.) Firebox and all stays and tubes are of steel; the regulator is of the multiple-valve type; there are two Klinger water gauges, two  
(Continued on page 525)



*Henschel-built 78½-ton Decapod with 52-ton tender attached, Central Uruguay Railway*



*Principal weights and dimensions of two-cylinder freight locomotive of 1,400 nominal horsepower*



## Buffet Trailers for G.N.R.(I.) Diesel Trains

*Converted from standard centre-corridor coaches  
and decorated to match the new railcars*



*Buffet bar, and trolley for seat service*

**A**N article in our September 7 issue described the diesel train services brought into use by the Great Northern Railway (Ireland) between June, 1950, and March this year, comprising ten train sets which have been working throughout the summer. The normal train composition is three cars of two railcars and an intermediate coach, but

sometimes an additional ordinary coach is attached as shown in the photograph reproduced below.

One of the features of the Dublin-Belfast run is the buffet car which also provides tray service to all seats. Drinks are dispensed on the train, either with meals or else from a train trolley, shown above. There are two trailer coaches

with these facilities, built by the G.N.R.(I.) and fitted and decorated to match the new A.E.C. diesel railcars described in our issue of June 2, 1950.

The two cars, which are similar in every respect and are described in greater detail in the November issue of our associated journal, *Diesel Railway Traction*, are 58 ft. long by 9 ft. 6 in. wide over body, and provide seating for 47 third class passengers on tubular frame seats. They were converted from standard centre-corridor coaches.

Tables are provided at all seats except the 16 seats situated at the entrance doors. A bar and small kitchen occupy the centre portion of the car, from which refreshments service is given throughout the train. When the bar is not in use, hinged shutters can be let down from the canopy over the bar, thus completely closing it. A lavatory is situated at one end of the car.

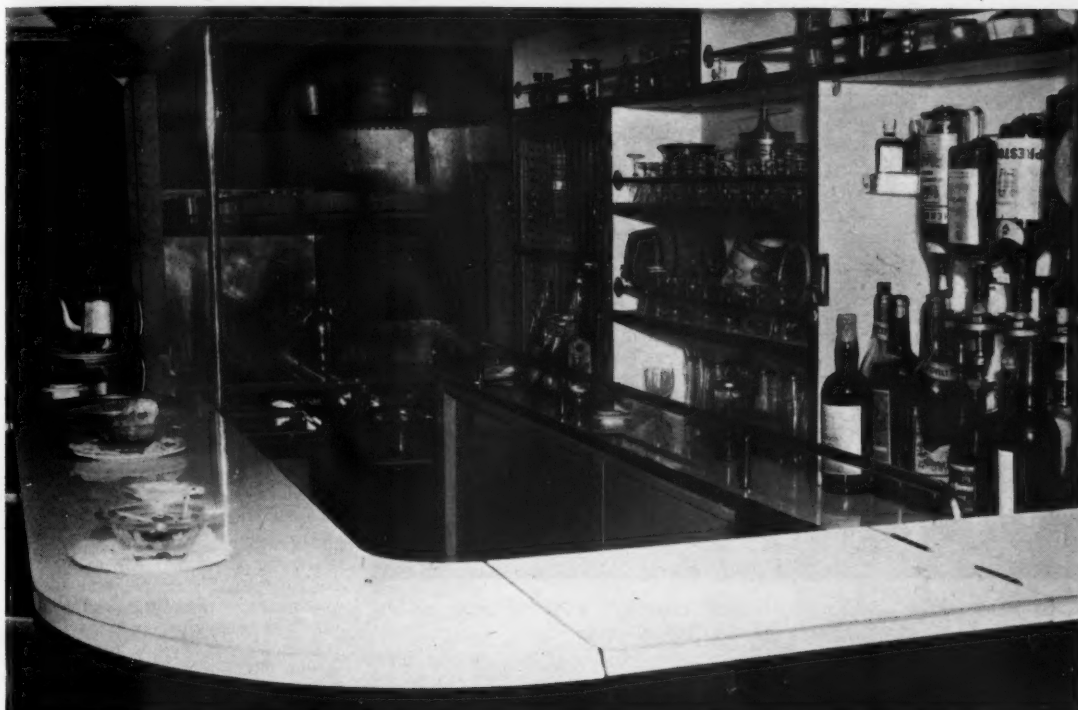
The kitchen and bar are used primarily for the service of morning and afternoon teas, and *a la carte* meals, and provide all classes of alcoholic and non-alcoholic drinks. When used for tours, luncheons are served on the outward journey, and high teas on the return journey.

The back of the bar has two glass-fronted compartments—one is an Eire locker which is sealed during the journey in Northern Ireland—and the other is the Northern Ireland locker which is sealed in Eire.



*Four-car diesel train on the Great Northern Railway (Ireland)*

## Buffet Trailers for G.N.R.(I.) Diesel Trains



*Buffet bar of trailer coach, showing the compact kitchen in the background*



*General view of bar section, showing seating arrangements for meal service. Mr. C. Johnston, Hotels & Catering Manager, G.N.R.(I.), and Miss M. Halton, Catering Supervisor, are seen on the left*

## Mechanised Appliances for Permanent Way Maintenance—2\*

*Effect of moving traffic on load-bearing structure formed by ballast, sleepers, and rails, and methods used in maintenance*



*Portable power-driven riddle for ballast cleaning, with vibrating screen manufactured by ABTUS Limited*

**W**ITH the general increase in train weight and speeds in the present century the question of efficient permanent way maintenance has become of paramount importance. Some account of the effect which traffic moving at speed can have on the load-bearing structure formed by the ballast, sleepers and rails will throw additional light on the problems confronting the civil engineer, which have been rendered the more difficult by the manpower shortage.

### Rail-Creep Adjustment

In time the rails tend to move along their length through the chairs; this is caused both by expansion and contraction and also thrust due to traffic. To bring the gaps back to the correct distance, a rail-creep adjuster is used. The appliance is attached to the rail ends, and by means of a ratchet and right and left hand screws, it draws the rails together, or forces them apart, so altering the gaps to the correct amount.

A good deal of thought and ingenuity has been given to evolving an ideal, but inexpensive, rail joint. Under traffic a rail is not absolutely rigid, but gives a continuous degree of flexibility, which for comfort and other reasons is very desirable. The ideal rail joint would not cause any break in flexibility, but as it must necessarily consist of two rail ends, each acting much as a spring-board, this is not easy to attain, particularly as a support vertically under the joint tends to be too rigid.

If ballast, sleepers and rails are to provide the support for which they have

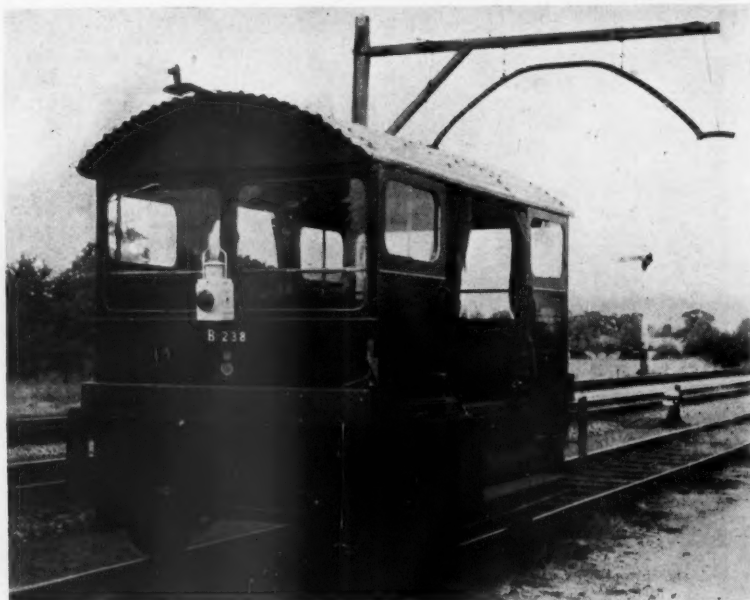
been designed, it is essential that their proper condition in relation to one another shall be maintained, and this constitutes the day-to-day work of the permanent way staff. Coupled with this aspect of maintenance is the wide field of alignment of the track, both straight and curved. The action of traffic tends to disrupt the alignment, both vertically and horizontally, and this has to be rec-

tified; in addition, the tendency on curves is to straighten out the line.

The standard method of consolidation is known as measured shovel packing, and it consists essentially in the addition of small sharp granite chippings in quantities sufficient to make good the voids, or deficiencies, under each sleeper and also to restore the general uniform surface of the track. The precise amount of chippings to be used in consolidating the ballast is determined by an instrument known as a voidmeter, which registers the amount by which the sleeper is depressed when a train passes over the track; the reading gives the number of measures, or canisters of chippings required. Readings are generally taken at each hanging sleeper; the amount of the deficiency is then chalked on the outside of the rail web.

The general level of the track and its correct cant on curves are restored by the use of sighting boards, designed to show the amount of chippings required for this purpose in the same unit as the voidmeter. Readings generally are taken at each joint sleeper and at every fourth sleeper, values for intermediate sleepers being interpolated, and the deficiency chalked on the inside of the web. The ballast is then opened out, the track jacked-up and the required amount of chippings spread over each sleeper bed; the track is then lowered and the ballast packed home.

An alternative method of packing is known as beater packing. A beater is a hand tool similar in general size and appearance to a pick-axe, but having



*Motor gang trolley built by D. Wickham & Co. Ltd., capable of carrying 15 men and a driver, with driving position at either end*

\* Part 1 of this article appeared in our November 2 issue





*P. & M. Co. (England) Ltd. rail lubricator in service*



*Hydraulic Engineering Co. Ltd. rail-creep adjuster*

a specially shaped head. It is used to consolidate the ballast under and around the sleepers; to a large extent, though, this work is now being done by

power-driven hand tools and larger machines, the tool face being similar to the beater head, and these beat the ballast, or vibrate it rapidly. A description

of this equipment will be given in the next article, as it is also used for realigning track.

Ballast tends to become clogged with



*Matisa ballast cleaner in operation, showing the cleaned ballast being thrown back on to the track from the short belt conveyor in the centre of the illustration. Dirt is being deposited in a wagon on the adjoining track by the long belt conveyor*

dirt, and apart from affecting its consolidation this tends to prevent the uninterrupted passage of rain water through to the foundation and its subsequent removal by the drainage. For cleaning purposes a power-driven riddle is used; this consists of a rapidly vibrating screen into which the ballast is thrown, cleaned and returned to the track. It is a light machine, which can be moved along the side of the line.

#### Ballast-Cleaning Machine

Where the dirt requires more thorough treatment a Matisa ballast-cleaning machine is now being introduced. This machine consists of an endless chain to which are attached a number of cutters that pass transversely under the sleepers and carry away the ballast by means of conveyor belts to an oscillating screen. The cleaned ballast is returned to the track and the dirt is passed to a wagon on an adjacent track, or in the rear.

Where the ballast has been removed it is necessary to support the track and this is done by placing wooden blocks under the ends of the sleepers. The rate of progress for this machine varies considerably with the depth of excavation and the type of material dealt with. It can dig down to some 18 in. below ground level, which is well into the foundation, and therefore can be used to excavate clay and similar materials.

The average rate of progress is about 100 yd. an hr.

There are a number of factors which cause a wide variation in the amount of rail wear. There is on curves a pressure against the outer rail caused by the tendency of vehicles to keep on a straight, as opposed to a curved, course and this results in the rail having to be changed more frequently than other rails. To overcome this it is becoming increasingly the practice to fit a rail lubricator, which is attached to the outside of the rail and is activated by the flanges of the wheels pressing down a treadle-type plunger.

This action forces grease up against the wheel flange and this grease is spread by the rotation of the wheel for a very considerable distance along the curve; in fact, it is often found that grease lubrication extends up to two miles beyond the lubricator. This lubrication has been found to increase considerably the life of the outside rail on curves. Another place where heavy wear occurs is on the point rail of crossings; these are often built-up by welding and ground to their original shape.

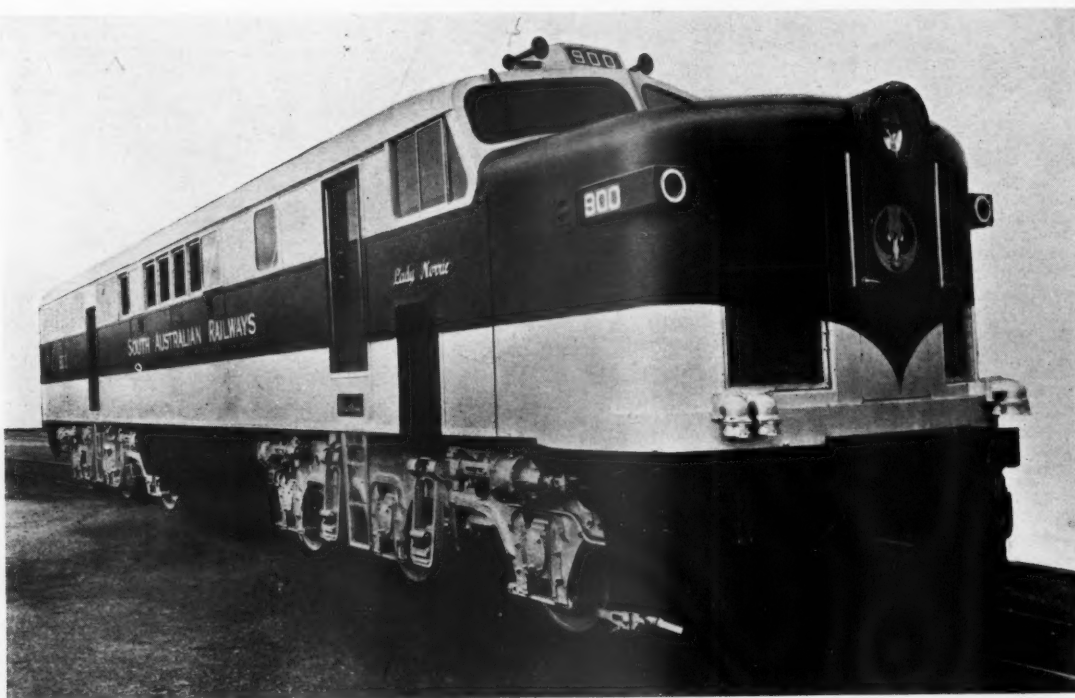
Quite apart from these specific operations there is the day-to-day work of the lengthmen such as driving in keys, tightening fishplate bolts, oiling joints, driving in spikes and aligning the track with the help of visual gauges. All this

work is covered by the ganger's inspection of his length on foot and is again checked by the permanent way inspectors, either on foot, or travelling in inspection trolleys.

The strength of the permanent way gangs varies considerably according to local conditions and circumstances, but generally speaking it lies between four and twelve men, and these are solely responsible for the maintenance of a given section of the line; this practice is traditional and has been evolved through several generations. Experiments are now being undertaken with the idea of making better use of the mechanical resources which are available today.

For this purpose the gangs responsible for an area covering from about 40 to 70 route miles are being re-organised to form a number of small groups and a few larger gangs of up to 25 men. Small groups will continue to carry out on foot the lighter duties of patrol inspection and adjustment, but the larger gangs will be mobile, having at their disposal either power-driven gang trolleys, or motor lorries. They will be equipped with a variety of mechanical aids such as have already been mentioned and will be capable of undertaking the whole of the major routine maintenance work within their area.

### First Australian Main-Line Diesel Locomotive in Service



Diesel-electric locomotive "Lady Norrie," built in South Australian Government Railways workshops. This 1,760-h.p. unit, the first of ten, powered by English Electric Co. Ltd. equipment, went into service on September 10, and was the first main-line diesel to operate on regular schedules on the mainland

## RAILWAY NEWS SECTION

## PERSONAL

Sir James Moir Mackenzie, Deputy Director-General of the Federation of British Industries, has retired.

Lord Leathers, P.C., C.H., LL.D. (Hon.), M.Inst.T. (Hon.), who, as recorded in our November 2 issue, has been appointed Secretary of State for the Co-ordination of Transport, Fuel & Power, was Minister of

Minister of War Transport from 1941 to 1945. He is an underwriting member of Lloyd's, a Warden of the Company of Shipwrights, and a Member of the Court of the Company of Watermen & Lightermen. His barony was gazetted in 1941 with the name, style and title of Baron Leathers of Purfleet in the County of Essex.

Mr. E. H. Huckle, Senior Assistant (General), Chief Regional Office, Eastern

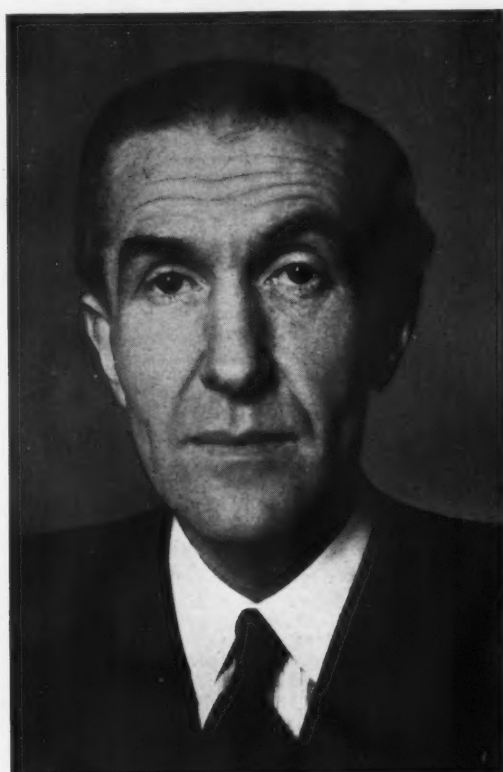
Lt.-Colonel H. Edmund Davies has resigned his appointment as Chairman of the Transport Users Consultative Committee for Wales, because of pressure of professional commitments.

Mr. J. S. Maclay, C.M.G., who, as recorded in our November 2 issue, has been appointed Minister of Transport & Civil Aviation, was born in 1905 and is a son of the late Lord Maclay, Minister of Ship-



*Lord Leathers*

Appointed Secretary of State for the Co-ordination of Transport, Fuel & Power



*Mr. J. S. Maclay*

Appointed Minister of Transport & Civil Aviation

War Transport between 1941-45. He was born in 1883, and at the age of 15 entered the offices of the Steamship Owners' Coal Association, which in 1913 was merged into the business of Wm. Cory & Son Ltd.; he subsequently became Chairman of Wm. Cory & Son Ltd. and of many Cory subsidiary companies. Consequent on his new appointment Lord Leathers has resigned from the board of Directors and Chairmanship of Wm. Cory & Sons Ltd. Among other companies, he has been a Director of Westminster Bank Limited, Tunnel Portland Cement Co. Ltd., Guardian Assurance Co. Ltd., Peninsular & Oriental Steam Navigation Company, British India Steam Navigation Co. Ltd., Union Corporation Limited, and Bay Hall Trust Limited. During the 1914-18 war he was associated with the Ministry of Shipping and subsequently served on Government Committees dealing with labour at the ports. In May, 1940, he joined the Ministry of Shipping as adviser on all matters relating to coal, and he was

Region, has been appointed Assistant (Salaried Staff), Regional Staff Office, Eastern Region, Liverpool Street.

Lt.-Commander Joseph Gurney Braithwaite, R.N.V.R., has been appointed Parliamentary Secretary, Ministry of Transport and Ministry of Civil Aviation.

Major-General C. A. L. Dunphie has been appointed a Director of Vickers-Armstrongs Limited.

Mr. A. D. Cochrane, Assistant District Operating Superintendent, Leicester, London Midland Region, has been appointed District Operating Superintendent, Gloucester, London Midland Region operating area.

Mr. R. Stokes, Lord Privy Seal and Minister of Materials in the late Government, is rejoining Ransomes & Rapier Limited, as Chairman & Managing Director.

ping between 1916-21. He was educated at Winchester and Trinity College, Cambridge. Mr. Maclay was a Director of Maclay & McIntyre Limited, shipowners, and is an underwriting member of Lloyd's and a member of the Baltic Exchange. Between 1941-45 he was a member of the British Shipping Mission in Washington and was appointed Head of the Mission in 1944; he was awarded the C.M.G. in 1944. He has been National Liberal & Conservative Member of Parliament for Montrose Burghs from 1940 to 1950 and for Renfrewshire West since 1950. From May, to July, 1945, Mr. Maclay was Parliamentary Secretary to the Ministry of Production. During the two Socialist Governments he was one of the principal opposition speakers on matters relating to shipping policy.

We regret to record the death on October 20 of Mr. Herbert Coope, M.I.E.E., Manager of the Cardiff Office of Metropolitan-Vickers Electrical Co. Ltd.





**Mr. C. F. Cleaver**

Who has relinquished the office of Manager, Railcars, but remains a Director of A.C.V. Sales Limited



**Mr. A. G. Dawson**

Appointed Treasurer, Eastern & North Eastern Regions



**Mr. A. H. Emerson**

Appointed Electric Traction Engineer (Manchester Electrified Lines), London Midland Region

Mr. C. F. Cleaver, M.I.C.E., M.I.Mech.E., M.I.Loco.E., who, as recorded in our October 19 issue, has relinquished the office of Manager, Railcars, but remains a Director of A.C.V. Sales Limited, will continue to exercise the general oversight and guidance of railcar negotiations for sale both at home and abroad, service arrangements, and new design and development work. Mr. Cleaver, who was appointed Director in charge of railcars on the formation of A.C.V. Sales Limited, was educated at Llandovery College, South Wales, and later, between 1905-08, at the Central Technical College, South Kensington, where he was awarded his A.C.G.I. diploma. After gaining technical experience with various firms, Mr. Cleaver in 1909 joined the Walthamstow factory of the London General Omnibus Co. Ltd., which later became the Associated Equipment Co. Ltd., as leading

draughtsman. He remained with this company until September, 1914, with the exception of one year, which he spent with Clayton & Company. At the outbreak of the first world war he joined the forces and became a Lieutenant I.M.T. in September, 1914; he was with the Army until demobilisation five years later, with the rank of Captain I.M.T. During this time he visited the United States to spend some years with the British War Mission, later in the capacity of Deputy C.I.M.T. In 1921 Mr. Cleaver formed, with Mr. H. Nyberg, the Four Wheel Drive Motor Company, with which he remained until the firm was absorbed by the Associated Equipment Co. Ltd.; he then transferred with the business connections to Southall. In 1934 Mr. Cleaver designed the first A.E.C. railcar and an order for 38 railcars by the Great Western Railway followed. During the 1939-45 war he was engaged in designing

vehicles for the War Department. Since the end of the war Mr. Cleaver has again been actively concerned with railcar design and substantial orders have been placed with the Group by the Great Northern Railway (Ireland) and more recently by Coras Iompair Eireann. A recent development in which he has been engaged is the design of equipment featuring the underfloor engine for converting standard coaches to railcars and in the coupling of three and four coach trains into future combinations of six and eight sets.

Mr. A. G. Dawson, Assistant Treasurer, Southern Region, who, as recorded in our November 2 issue, has been appointed Treasurer, Eastern & North Eastern Regions, entered the service of the South Eastern & Chatham Railway in 1919 and on the amalgamation in 1923, was transferred to the Secretary's Office of the



**Mr. T. E. Wilson**

Appointed Assistant Electric Traction Engineer (Manchester Electrified Lines), London Midland Region



**Mr. S. H. Scholes**

Assistant Regional Staff Officer, London Midland Region, 1949-51



**Mr. L. E. Hawkins**

Appointed Assistant Civil Engineer (Structures), London Transport Executive

Southern Railway. He served as a Fighter Controller in the Royal Air Force during the war and, on demobilisation, resumed duty with the Southern Railway as Clerk to the Finance Committee. In July, 1947, Mr. Dawson was appointed Assistant Treasurer.

Mr. A. H. Emerson, A.M.I.E.E., A.M.I.Loco.E., A.F.P.W.I., Resident Electrical Engineer, Manchester-Sheffield-Wath electrification, who, as recorded in our October 26 issue, has been appointed Electric Traction Engineer (Manchester Electrified Lines), Manchester London Road, London Midland Region, was educated at King's School, Grantham, and King's School, Peterborough. In 1929 he began training in mechanical and electrical engineering as a premium apprentice at Peterborough Running Shed; he continued this training at Doncaster and South Gosforth and subsequently at Grimsby Docks. In November, 1936, Mr. Emerson entered the Electrical Engineer's drawing office (electric traction section) at Kings Cross and, after approximately eighteen months, was appointed Technical Assistant. From December, 1940, to April, 1944, he was Acting Electrical Assistant of the former L.N.E.R. factory at Dukinfield engaged on armament production. Returning to the L.N.E.R. Electrical Engineer's Headquarters, Kings Cross, in April, 1944, as Technical Assistant in the rolling stock section, he worked on the Liverpool Street-Shenfield and Manchester-Sheffield-Wath electrification schemes. He became Resident Electrical Engineer for the Manchester-Sheffield-Wath scheme in February, 1950.

Mr. T. E. Wilson, A.M.I.E.E., Assistant Resident Engineer, Manchester-Sheffield-Wath electrification, who, as recorded in our October 26 issue, has been appointed Assistant Electric Traction Engineer (Manchester Electrified Lines), Manchester London Road, London Midland Region, joined the former L.M.S.R. as an apprentice at Stonebridge Park power station and at the conclusion of his training was appointed fitter. In November, 1934, he became a junior draughtsman at Euston and later Technical Assistant. Mr. Wilson was appointed Substation & Track Engineer on the L.M.S.R. electrified lines in the Manchester area and in December, 1950, was transferred to the Railway Executive Electrical Engineering New Works & Development Section as Assistant Resident Electrical Engineer for the Manchester-Sheffield-Wath electrification scheme.

Mr. S. H. Scholes, Assistant Regional Staff Officer, London Midland Region, who has retired, began his career in the Liverpool District, and after station experience, joined the staff of the District Superintendent. He was transferred to London in 1915. Mr. Scholes joined the Army and saw service in Salonica, France and Italy and was closely associated with the setting up of the Mediterranean line of communication between Cherbourg and Taranto. On returning to the railway in 1919 he resumed staff work at Euston and subsequently was promoted to Manchester and Derby before his appointment as Assistant to Superintendent of Organisation & Staff for Operating & Motive Power Departments in 1934. In 1943 he became Assistant (General), Labour & Establishment Office, Euston, and was appointed Assistant Regional Staff Officer, London Midland Region, in 1949. During his career he has served on a number of im-

portant committees concerned with the improvement of organisation both in the Departments to which he was attached and with the railway as a whole, and also on closer working and pooling with other companies. He was a member of the Council of the School of Transport, Derby.

Mr. L. E. Hawkins, who, as recorded in our November 2 issue, has been appointed Assistant Civil Engineer (Structures), London Transport Executive, with responsibility for the maintenance of all buildings, bridges, structures and earthworks and for the design and erection of bridge and structural work, began his railway career in 1921 under Mr. John Miller, then Chief Engineer of the Great Eastern Railway. From 1924 to 1930 he was with the Madras & Southern Mahratta Railway as Assistant Engineer, District Engineer and Personal Assistant to the Deputy Chief Engineer for New Works. He joined the Underground Group in 1930 and was engaged on design and on the execution of works for both rail and road services by contract and by direct labour. He served during the war with the Royal Marines and the Royal Engineers in Britain and N.W. Europe, and was a Lt.-Colonel, R.E., at the time of his release; he now holds a commission in the Supplementary Reserve (Tn.), R.E. On his return to London Transport in 1946 Mr. Hawkins took charge of the design of permanent way, bridges and engineering structures and of the execution of bridge works.

Mr. W. Gilmour Smith, Managing Director of W. Gilmour Smith & Co. Ltd., is leaving for an extensive overseas tour on November 14. His itinerary includes visits to the Nigerian Railway, South African Railways, Rhodesia Railways, East African Railways & Harbours, and the Sudan Railways. On his return he will be visiting the Spanish Railways, and will arrive back in this country on December 21.

We regret to record the death on October 31, at the age of 77, of Mr. W. H. Gaunt, C.B.E., J.P., M.Inst.T., a Director of J. Lyons & Co. Ltd. and head of that company's transport system. He was one of the greatest experts on commercial transport in this country and was a champion of British canals and their maintenance and development. When he joined Lyons in 1919, 1,000 horses were used for food delivery; today, the company has a food transport fleet of 1,500 vehicles. Mr. Gaunt was one who took a prominent part in the development of the first garden city at Letchworth, where he developed its industrial and traffic facilities. Before this, he had chief responsibilities in connection with land development in the North, in particular at Trafford Park, Manchester, where he was concerned with the provision and operation of railways, roads and electric tramways. In his earlier years, he was engaged on the construction of the first London tube railway and on work for the Indian State Railways. During the 1914-18 war, Mr. Gaunt was Distribution Superintendent for the Board of Trade, in connection with the rationing of coal, gas and electricity, and also a member of the British committee formed to advise the French Government on the reconstruction of the devastated areas. He was Director of Transport in the Ministry of Food in 1940 and a member of Lord Reith's Council for Physical Planning & Reconstruction in 1941. He was also Chairman of the Thames Barrage Association and a one-time President of the National Housing & Planning Council. Mr. Gaunt had

been President of the Mansion House Association on Transport for many years.

Dr. A. S. Browne has been appointed Assistant Medical Officer, Eastern Region, with effect from November 12.

We regret to record the death on October 20, at the age of 72, of Mr. R. S. Hart, President of the National Steel Car Corporation Ltd., Canada.

Mr. G. D. D. Greig, Assistant District Engineer, Aberdeen, Scottish Region, has been appointed Assistant (Maintenance) to the Chief Officer Engineering (Maintenance), Railway Executive.

Mr. Arthur Parkinson has been appointed to the board of Directors of Crompton Parkinson Limited. In consequence of this appointment he has ceased to be an Executive Director of the company and has relinquished his executive position as Assistant General Sales Manager of the Plant Division of the Sales Department. Mr. Parkinson will undertake special duties assigned to him by the board of Directors.

## Freight Locomotives for Uruguay

(Concluded from page 517)

Crosby safety valves, and two live steam injectors. At the sides of the smoke-box are fitted the present German standard type of smoke deflectors of small plate area and wide air gap.

Two 530 mm. by 600 mm. (20.8 in. by 26 in.) cylinders drive the third pair of 1,525 mm. (60 in.) coupled wheels. Wheelbase particulars are given on the diagram. The Walschaerts motion has screw reverse; and the cab, almost entirely enclosed, has two upholstered seats. The bar frames are made up of steel slabs, and the laminated spring system is compensated, the springs of the first two pairs of axleboxes being connected to the leading pony truck. Steam brakes are applied to all coupled wheels, but vacuum brake is applied to the tender wheels and automatic vacuum equipment included for the train brakes. Steam sanding apparatus is fitted.

The double-bogie tender frame is made up of standard plates and profiles welded up. Water capacity is 21.5 cu. m. (4,750 gal.) and fuel, oil capacity 8.5 cu. m. (1,880 gal.). Tender wheel diameter is 914 mm. (36 in.) and the empty weight is 22 tons. Steam heating is used to keep the oil fuel warm and free-flowing.

At 75 per cent. of the boiler pressure of 16 kg. per sq. cm. (227 lb. per sq. in.) the tractive effort is 14,550 kg. (31,900 lb.), giving a factor of adhesion of 4.84. Empty weight of the locomotive is 71½ tons. A top speed of 90 km.p.h. (56 m.p.h.) is allowed, though service conditions are not likely to call for such a speed.

These locomotives and tenders were built to the limits and fits system of the German Federal Railway, and inspection was carried out by officials of the Federal Railway acting for the Uruguayan Government.

## Passenger Charges Scheme, 1951

*Evidence given by Sir Reginald Wilson before the Transport Tribunal on B.T.C. general reserve and capital needs*

Sir Reginald H. Wilson, Comptroller, British Transport Commission, was called to give evidence before the Transport Tribunal at the resumed inquiry on October 31, and in expressing confidence in the future said that, while there was no reason why the public transport system should fail to function on a sound and satisfactory basis, there might be changes in the volume of traffic and at the same time costs were still rising. Therefore there was a need for more flexibility and permanence in adjusting charges to such changes.

### London Area Working Expenses

When the scheme was prepared in April, working expenses in the London area totalled £78,800,000, but since then, there had been further rises, and £3 million was needed to cover wage agreements already made and those now being negotiated. If the present trend of cost levels continued in any significant degree, such as the recent trend of 6 per cent., twelve months from now working expenses would be enhanced by about £3 million a year.

It was estimated that the costs for 1952 would be about £84,800,000. The yield from the scheme for the London area was £91,300,000, and on this basis there would be surplus of £6½ million, some £6 million of which would be needed for central charges, which was a very reasonable figure, and only £500,000 would be available for allocation to replacement and general reserves.

They were charging revenue with repairs and renewals on a formula which was not excessive. They were providing for depreciation only on historical cost and for general obsolescence at the rate of 2½ parts in 1,400. On the other hand they made no provision in the accounts to meet the current cost of wastage on the category they called the replacement assets. Many civil engineering works constructed 100 years ago were now coming up together for repairs and they were not allowed for in any depreciation scheme.

He considered that the B.T.C. was much more vulnerable to the effects of obsolescence than many other undertakings. First, they were restricted to carrying on certain types of activity, and, second, many of their assets were geographically fixed, and it followed that they could not compensate themselves when parts of the business decayed by seeking new opportunities elsewhere.

There had been no true rise in London fares compared with pre-war. The real level of fares indeed was less. Cost levels had risen by about 120 per cent., while London Transport fares had risen only 43 per cent., and would be only 80 per cent. above prewar if the proposed new charges were approved. A rise in fares was in fact about 10 per cent. less than the increase in the weighted price-index for other consumer commodities.

Sir Reginald Wilson, in continuing his evidence on November 1, stated that the target for net receipts for the B.T.C. as a whole was £77 million. Various parts of the B.T.C., he said, must be encouraged to produce net receipts which in total would suffice to maintain the undertaking in the widest sense, meet the enhanced cost of replacement of assets, and build up a general reserve.

Sir Malcolm Trustram Eve, K.C., for

the B.T.C., asked whether that target of £77 million if achieved would suffice, and witness replied that it would cover the central charges of £52 million, provide £15 million for the rising cost of replacement, and leave £10 million to be labelled general reserve. Extra provision required to meet the rising replacement costs of assets ought to be made out of current consumption and not added to the capital expenditure. The provision of £10 million towards general reserve could not be called onerous at a time of full employment and great industrial activity.

Sir Trustram Eve: "Are you satisfied with this target of £77 million on grounds other than central charges and reserves?"

Sir Reginald Wilson: "If the working expenditure rises without a corresponding increase in the working receipts, then the £77 million would be eaten into, but the £77 million as a target for central charges, the rising cost of replacement, and the allocation to general reserves, was not unreasonably satisfactory."

Mr. A. Capewell, K.C., appearing for a number of county councils and season ticket holders, suggested that for practical purposes there was no possibility of the B.T.C. establishing a general reserve for years to come.

Witness did not agree. There had been times when the finances balanced and it was only because there had been rapid waves of increases in costs that this had not been done. They should not assume that year after year they were going on accumulating deficits. To establish a reserve they would have to get fares and charges into equilibrium with costs and they would hope that either the steady rise in costs would not continue or that they would have an accelerated method of dealing with the effect of the costs on the level of their charges.

### Borrowing Necessary

Later, speaking of the position of the B.T.C. regarding investment income, Sir Reginald Wilson said it was now possible to say that they would not only have no surplus monies very soon, but they would have to borrow. That position was not so clear early this year. Equilibrium had been achieved several times already and what had been done once could be done again. For all practical purposes equilibrium was planned in May this year. The remedy—as he called it—was not completely applied because they had been waiting for the increased charges planned under the passenger scheme. If they could get a quick adjustment of charges to the levels of costs their troubles were over.

Mr. Harold Wills, for the Kent County Council, asked whether the provision of a replacement reserve was necessary at the present time.

Sir Reginald Wilson replied that it was not absolutely necessary in a technical sense as it was always possible to throw the burdens of this generation on to generations to come. The provision of £2 million for the general reserve from London was necessary as a piece of sound and prudent financial business.

Mr. Leon Maclaren, for the L.C.C., in referring to the evidence that in a real sense fares were cheaper in London now than before the war, said that it depended on which way one looked at it. The increase in rates of charge might be 80 per

cent., but the important thing to consider was not rate of charge, but rather the expenditure by the public on B.T.C. services.

Answering Mr. J. E. Morrish, for the Post Office Engineering Union, concerning capital development which would lead to large-scale economies, Sir Reginald Wilson said that these could not be brought into operation for at least five years.

### Suggested Dates of Operation

On Tuesday, when the evidence of Sir Reginald Wilson was ended, Sir Trustram Eve said that he was now in a position to answer a question the President had put to him earlier, which was that, assuming a scheme not differing in principle from the present one were confirmed, how long would it be before it could be brought wholly into operation.

The London section of the scheme would require approximately three months from the date on which the decision of the Tribunal was known, but the B.T.C. had decided to put in hand immediately certain preparatory work on the basis of the scales and charges in the proposals, and as a result it would be possible to put them into operation in February next. If alterations were made in any of the scales, or in the suggested treatment of sub-standard charges, some preparatory work would have to be done again, and the full three months would be required.

Alterations in the single fares on London lines, and applying the suggested level for monthly return fares, would have to wait for the date on which the Railway Executive section of the scheme came into operation. The earliest date for this was about the end of April next year and in this case the B.T.C. had already put in hand much of the preparatory work. It would be practicable for the London Transport Executive on the other hand to introduce the 2d. minimum ordinary single fare very soon after the operative date. It would also be practicable for all Railway Executive lines in and outside the London area to increase the monthly return fares at two or three weeks' notice.

The case for the B.T.C. having been concluded the Tribunal next heard evidence from Mr. S. W. Hill, financial adviser to local authorities and public utilities undertakings, who was called by Mr. A. Capewell, K.C., appearing for a number of county councils and season ticket holders.

Mr. Hill said he found it impossible to share feeling of optimism in regard to the finances as a whole. It must be many years before the B.T.C. deficit of about £50 million could be repaid even if there was some slight improvement in the general level of costs. The possibilities of providing for the general reserve or replacement value reserve were in his opinion not practical politics.

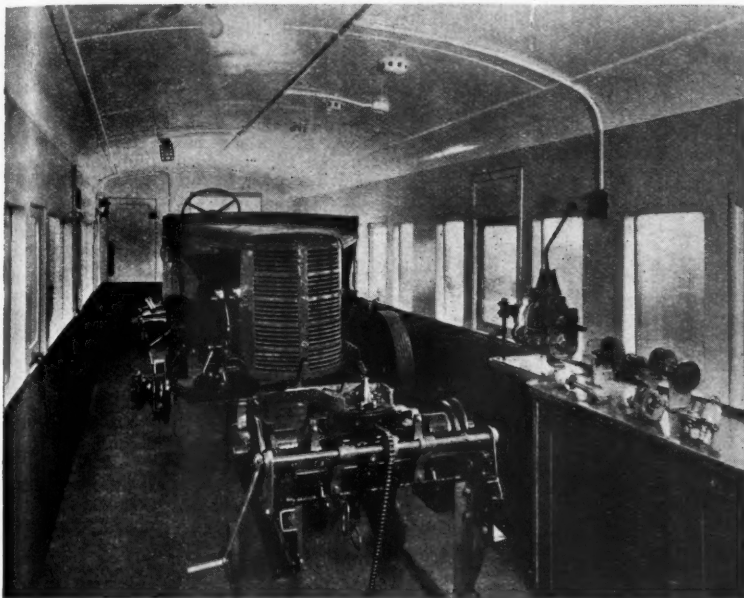
The inquiry adjourned until November 7.

**SAFE DRIVING AWARDS AT YORK.**—Forty-two out of 45 British Railways motor drivers at York who entered for the 1950 competition have won safe driving awards. On November 1, Mr. E. W. Arkle, Commercial Superintendent, North Eastern Region, who was accompanied by the Chief Constable of York, Mr. H. H. Herman, presented the prizes.



## Mobile School for Motor Drivers, Southern Region

*Railway coach converted to instruction unit for theoretical and practical training*



*Section of the school with full-size chassis and model coupling gear*

At Nine Elms Yard, on November 2, Mr. C. P. Hopkins, Chief Regional Officer, Southern Region, inaugurated a mobile unit which the Southern Region has introduced for the training of prospective motor drivers. He was accompanied by Messrs. A. A. Harrison, Executive Officer (Road Transport), A. E. C. Dent, Executive Officer (Road Motor Engineering), Railway Executive, and W. H. F. Mepsted, Commercial Superintendent, Southern Region.

Mr. Hopkins expressed his pleasure at opening the school, the first of its type on British Railways, and called it a further instalment of the policy of the Railway Executive in training staff on the parallel lines of theory and practice.

The unit is incorporated in a 52 ft. long former L.S.W.R. bogie coach, divided into three sections: (1) demonstration units for semi-technical instruction; (2) lecture room including model road layout; and (3) general store for portable equipment used outside the coach.

Section 1 has been equipped with a full-size actual commercial vehicle chassis suitably sectioned, with other sectioned components, including engine; gearbox; differential unit; carburettor; armature; coil; distributor (working model); hydraulic brake layout (working model); magneto; and fuel pump. A further feature of the equipment in this section is a full-size working model of a 3-ton Scammell coupling gear so arranged that coupling and uncoupling operations can be performed in slow motion.

### Lecture Room

Section 2 has been adapted as a lecture room of sufficient size to accommodate an Instructor and four pupils; it is equipped with a road diagram on a hinged table which can be lowered when not in use. This diagram is used for demonstration

with model vehicles and a set of road traffic signs. This layout also enables the circumstances of accidents to be reconstructed and is used to impress on pupils the methods to be adopted to avoid them.

Section 3 is a general store to accommodate the following portable equipment used for training purposes outside the coach: one complete set of full-size traffic colour lights; one complete set of full-size road traffic signs; one manual control panel and stand for traffic light operation. Each article is provided with its own fitted section for securing in transit.

### Heating and Lighting

As the instructional work will be carried out all the year round, two slow-combustion heating units are installed, one in each instructional section of the coach. A small motor generator unit on the coach underframe will provide lighting in all sections and current for the traffic colour lights.

The coach will normally be situated at Brooklands Road Depot, Nine Elms, but it may be moved to any part of the Southern Region to meet local demands for training instruction. Thus, trainees avoid excessive travelling time or lodging away from their homes. Brooklands Road Depot is particularly convenient for initial driving instructional purposes as it provides, away from the public highway, facilities for planned demonstration routing of vehicles including controlled crossings, one-way streets, halt signs at road junctions and uncontrolled pedestrian crossings.

The curriculum includes all items to assist the driver in attaining a high standard of driving proficiency, avoidance of accidents and impart general information on the preparation of railway documents. For driving instruction a 3-ton Rigid motor and a 3-ton mechanical horse unit with trailer are supplied, and much of the period

of training is occupied with the driving of these vehicles. A fortnight's initial tuition at the training school will be followed by a week's tuition on the highway under the supervision of a qualified driver.

## Egyptian Main-Line Services

The current Egyptian State Railways timetable shows seven steam and three diesel-electric express trains each way daily between Cairo and Alexandria, 130 miles. The steam trains are allowed from 3 hr. 50 min. north- and 4 hr. south-bound to 2 hr. 45 min. in either direction, with four stops. Three trains each way include air-conditioned first class accommodation, six include Pullman, two include restaurant cars, and one a second class coach equipped with buffet.

The articulated diesel-electric trains stop only at Tanta and at Sidi Gaber, three miles from Alexandria. Between Cairo and Tanta, 54 miles, 55 min. are allowed in either direction, and 72 min. north- and 70 min. southbound between Tanta and Sidi Gaber, 73 miles. Some description of the diesel trains, of which the engines, electrical transmission, and controls were supplied by the English Electric Co. Ltd., and the coachwork and bogies by the Birmingham Railway Carriage & Wagon Co. Ltd. as sub-contractors to the English Electric Co. Ltd., was given in our issue of December 15, 1950.

Between Cairo and Port Said via Zagazig and Ismailia, nearly 150 miles, there are four steam expresses each way, allowed from 3 hr. 40 min. (northbound) to 4 hr. 10 min.; two of these include a first class coach with restaurant service, and two a second class coach with buffet. In addition there is one diesel train working of 2 hr. 55 min. in either direction. There are also some semi-fast diesel train workings in the Delta. A pair of semi-fast through steam trains with restaurant service between Cairo and Rafa, on the Israel border, via the Kantara bridge over the Suez Canal, gives an additional service to Ismailia; there is now no through service to Haifa or Jerusalem.

Services to Upper Egypt comprise one night and two day trains each way between Cairo and Luxor, 420 miles. Of the day trains, one pair includes a Pullman car, and one an air-conditioned first class coach; the latter pair is allowed 10 hr. 15 min. north- and 10 hr. 20 min. southbound. The night trains include a restaurant car and a Wagons-Lits Company's sleeping car, and take some 11 hr. They run through to and from Assouan and Shellal, at which latter point they connect with the Sudan Government Railways steamers to and from Wadi Halfa, thence by rail with Khartoum.

**SYMPOSIUM ON THE CORROSION OF BURIED METALS.**—The symposium on the corrosion of buried metals, organised by the Iron & Steel Institute in conjunction with the British Iron & Steel Research Association and the Corrosion Group of the Society of Chemical Industry, of which details were given in our issue of August 3, will be held on December 12 at the Institution of Electrical Engineers, Savoy Place, London, W.C.2, at 10 a.m., not at the offices of the Iron & Steel Institute as previously arranged. This change is due to the large numbers wishing to attend.

## Rebuilt Station Premises, Girvan, Scottish Region

*Booking and parcels offices modernised  
and fluorescent platform lighting installed*

New station buildings comprising booking office, parcels office, public waiting rooms, and so on, have been brought into use in the Scottish Region at Girvan, Ayrshire. These premises replace those built in 1893, which were destroyed by fire in January, 1946, and the new buildings and furnishings are in the modern style.

The work of reconstruction began in

offices present a neat and attractive appearance and there is good lighting, and economical heating and adequate messing facilities for the clerks. There are adequate cupboards, drawers, ticket stock accommodation, and reference slides in the ticket office. Two batteries of Bellmatic ticket equipment, each in three tiers of 16 tubes, are a feature of the office.



*Main entrance to the new station at Girvan*

June, 1949, progress since being considerably retarded and on many occasions completely held up, because of the difficulties in obtaining materials. The buildings are of brick with pre-cast stone dressings throughout.

The entrance from the station approach leads to a hall off which all offices, including the bookstall, open. The accommodation is centrally heated, with radiators fitted in all rooms except the foyer and booking hall, which are heated by special floor heating from a central heating system. The internal walls are finished in plaster, with the exception of the foyer, which is finished in a special material not easily marked and more readily kept clean.

Owing to difficulty in obtaining new steelwork, old rails are used for forming the cantilevers for the awning over the platform, and these are sheathed with aluminium to match the rest of the awning. The awning is constructed of corrugated aluminium sheets finished on top with bituminous sheeting. With this type of construction the weight of awning imposed on the rail supports is considerably reduced. A feature of the platform lighting is the modern fluorescent fittings illuminating the station name signs.

The booking and parcels offices have been modelled on up-to-date lines and are the first of their kind in Scotland. The traditional pigeon-hole type of booking office has been replaced by a glass-fronted office and conversation between passenger and booking clerk is conducted through Hygiaphone windows. The

The parcels office, adjacent to the ticket office, includes eight glass-topped slides for parcels scale cards, together with a lock-up cupboard with an adjustable shelf for valuables beneath the counter. The parcels weighing machine is inset with the scale platform at counter level to minimise handling of traffic. An office indexing and location system has been introduced.

### Staff & Labour Matters

#### T.U.C. Co-operation with Government

After its first meeting since the formation of the new Government, the General Council of the T.U.C. on October 31 issued a statement on the policy of co-operation "with whatever Government is in power."

"There need be no doubt," the statement reads, "of the attitude of the T.U.C. towards the new Government. In joint consultations and in all other activities it will be our constant aim and duty to ensure the steady progress and betterment of the general conditions of Britain and of our people. We shall continue in that duty under a Conservative Government."

Since the Conservative administrations of pre-war days, the statement continues, the range of consultation between Ministers and both sides of industry has considerably increased and the machinery of joint consultation has enormously improved. The T.U.C. expects of this Government that it will maintain to the full the practice of joint consultation.

"We shall continue," it adds, "to

examine every question solely in the light of its industrial and economic implications. The trade union movement must always be free to formulate and to advocate its own policies."

#### Railway Wages Claim

In the *Railway Review* of November 2 Mr. J. B. Figgins, General Secretary of the N.U.R., says of the recent proceedings before the Railway Staff National Tribunal: "Transport must be made to give to those in its service conditions of employment worthy of their great responsibilities. For that reason we have resolved not to tolerate the continued failure of the Railway Executive to face its responsibility to the men and to the nation."

"I sincerely trust that we have sufficiently influenced the Chairman of independent members of the Tribunal as to make them recognise the overwhelming strength of our claim for the 10 per cent. increase."

"Justice demands that our claim be met in full, and only by this means can transport be made to serve the interests of the country."

#### Labour and the Conservative Majority

In the same issue of the *Railway Review*, Mr. Figgins describes the consequences of the general election as "1931 all over again," but with the Conservative Party not possessing an overwhelming majority in the Commons.

The situation is regarded as one of extreme seriousness for Labour politically and industrially. It is stated that in the meantime the centre of gravity for the workers has shifted from Parliament to the head offices of the trade unions.

This, the article continues, is acknowledged on all sides. "The possibility of serious industrial disruptions is widely feared and unless Sir Walter Monckton keeps a sharp eye on his colleagues in the Government these fears may be transformed into living realities, as they were after the first world war."

#### Railway Shopmen's Claim

A limited increase in the pay of railway engineering workers was offered by the Railway Executive to the employees' side of the Railway Shopmen's National Council at a meeting on November 5. The N.U.R. and C.S.E.U., whose representatives form the employees' side of the Council, had submitted a claim for a substantial increase.

The Railway Executive offer will be discussed at separate meetings of committees of the N.U.R. and the C.S.E.U. and at a full meeting of the employees' side before a reply is given to the Executive.

#### Denationalisation of Steel and Road Haulage

The executive council of the Amalgamated Engineering Union on November 6 issued a statement expressing its grave alarm at the decision to annul the Iron & Steel Act, and calling for "the strongest opposition to the handing back of road haulage to private interests."

**SILVERTON TRAMWAY CO. LTD.**—The report of the directors of the Silvertown Tramway Co. Ltd., Melbourne, for the year ended June 30, shows a net profit, after allowing for taxes, of £54,076, which, with the amount brought forward from the previous year, £7,645, gives a total of £61,721. After providing for dividends and general reserve there remains £6,515 to be carried forward to next year.

## Railway Medical Service in Pakistan

On the North Western Railway of Pakistan there are 54 hospitals and dispensaries under the Chief Medical & Health Officer of the railway, assisted by five Divisional Medical Officers, responsible to each of the Divisional Superintendents. The hospitals at divisional headquarters are well equipped, with wards for indoor treatment of railway employees and their families. At every outstation with a locomotive depot there is a dispensary. At Lahore the central railway hospital, the Cairns Hospital, has an air-conditioned surgical ward, and there are air-conditioned rooms for heat-stroke treatment in some of the dispensaries. Four other hospitals are also to have air-conditioned wards shortly. Four of the main hospitals have X-ray plant.

Eyesight tests are carried out on all running staff, including station staff, every three years until they are 45 years of age; those over 45 are tested annually. All running staff must pass first-aid examinations, and all passenger trains are equipped with first-aid boxes. All platform food-vendors and refreshment room staff are medically examined on appointment and are given certificates on which their photographs are stamped by a doctor to avoid impersonation. Food stuffs and water supplies are periodically tested. The doctors in charge of hospitals and dispensaries have also to look after the staff and families on adjacent sections of line, and visit the sick at outstations when necessary. Sanitary Inspectors are responsible to them for the sanitation of all railway property, anti-malarial measures, and disinfection.

## Record Blast at Caldron Low

One of the largest blasts ever blown in a British quarry took place on November 2 at Caldron Low Quarry, one of 17 quarrying units owned by Derbyshire Stone Limited. A description of the quarry, which supplies large quantities of ballast for British Railways, was given in our issue of September 17, 1948.

The operation was designed to bring on to the quarry floor a complete section of the quarry face, 380 ft. long  $\times$  150 ft. high  $\times$  70 ft. deep, from the tunnel floor level to the top of the quarry. Preparations for the blast began in August, 1951. Two entrance tunnels were constructed to provide more working faces and reduce the time of preparation. Chambers were made to contain the charge and primers inserted containing electric detonators connected in duplicate circuits leading to the entrances. To ensure detonation, the charges were interconnected with a high-speed detonating fuse.

### Large Scale of Operation

The blast was planned on an exceptionally large scale to facilitate rapid progress in the development of the quarry suitable for its efficient working in connection with new plant and mechanisation. The explosive was ammonal, and the charges aggregated 50,100 lb.

At the invitation of Mr. John Hadfield, Chairman & Managing Director of Derbyshire Stone Limited, the blast was fired by Mr. A. P. J. Ball, Estate & Rating Surveyor, London Midland Region, and some 278,000 tons of limestone were brought down.

Welcoming the guests at luncheon at the North Stafford Hotel, Stoke, after the blast, Mr. Hadfield emphasised the dependence of industry on the railways,

and regretted that many industrial products were consigned by road because of the inability of the railways to handle them. Mr. George Morton, retired Chief Financial Officer, the Railway Executive, in reply, affirmed his faith in British Railways, the best managed in the world.

Others present included:

Alderman H. Barks, Lord Mayor of Stoke-on-Trent; Major W. H. C. Clay, Director, Hadfields Limited; Messrs. A. Forbes Smith, Stores Superintendent, E. & N.E. Regions, British Railways; P. R. Hickman, Chief Officer (Stores), the Railway Executive; J. W. Hobday, Director, Derbyshire Stone Limited; and A. Reid, Mining Engineer (Derby), the Railway Executive.

London Midland Region: Messrs. J. W. Watkins, Chief Regional Officer; J. Taylor Thompson, Civil Engineer; A. E. Hammett, Commercial Superintendent; A. B. MacLeod, Stores Superintendent; H. Bullough, District Commercial Superintendent, Stoke; C. F. Cade, District Estate Surveyor, Crewe; W. B. Carter, District Commercial Superintendent, Derby; J. Dickson, District Engineer, Derby North; F. Egerton, District Operating Superintendent, Stoke; A. I. Macmillan, District Engineer, Crewe; and W. A. Robertson, District Engineer, Walsall.

## Contracts & Tenders

The Crown Agents for the Colonies have recently placed a contract with the Gloucester Railway Carriage & Wagon Co. Ltd. for 181 bogie high-side wagons for the Gold Coast Railway.

The Queensland Government Railways have placed a contract with the Commonwealth Engineering (Queensland) Pty. Ltd. for 1,000 "VJM" class hopper wagons.

The Western Australian Government Railways have recently placed a contract with Societe Metallurgique d'Enghien - St. Eloi, S.A., Enghien, Belgium, for the bodies and underframes for 180 "VD" class louvered wagons.

A contract for sub-assemblies for 750 40-ton bogie coal wagons for the New South Wales Government Railways has been placed with Waggonfabrik Talbot, A.G., Aachen, Germany. The wagons are to be built in Australia.

The South African Railways have placed an order for 25 of their Class "GM" type Beyer-Garratt locomotives and 25 Class "GO" type Beyer-Garratt locomotives (a new design) with Henschel & Sohn G.m.b.H., Kassel, Germany, under licence from, and in collaboration with, Beyer, Peacock & Co. Ltd., Manchester, England.

The "GM" type locomotive will be based on the design of 16 of this class built by Beyer Peacock for the South African Railways in 1938 and will incorporate the latest Garratt practice of Beyer Peacock and will also have mechanical stokers and cast-steel unit chassis beds. They will be used for the heavier type branch lines and will have a tractive effort of approximately 69,000 lb. at 85 per cent. boiler pressure.

The new design "GO" type will be used for branches with lighter rail and will have a tractive effort at 85 per cent. boiler pressure of 56,000 lb. This new design will be essentially similar to that of the improved "GM" class, both engines having a 4-8-2+2-8-4 wheel arrangement.

The Board of Trade, Commercial Relations & Exports Department, Special Register Information Service, states that the Commercial Secretary at the British Embassy, Montevideo, has reported a call for tenders by the Ferrocarril Central del Uruguay for the supply of 120 wheels for wagons of a capacity of 50 tons (dia. of wheels 838 mm.; nominal weight 750 lb.). Tenders should be addressed to the Administracion de Ferrocarril Central del Uruguay, Calle La Paz No. 1095, Ciudad Uruguay, and should reach there by 10 a.m. on December 4.

A copy of the Specification No. C.M. 174 (in Spanish) is available for inspection by representatives of United Kingdom manufacturers at the Board of Trade, Commercial Relations & Exports Department. A second copy is available for loan to United Kingdom manufacturers in order of written application to the Department.

The Special Register Information Service of the Board of Trade, Commercial Relations & Exports Department, has also stated that the British Consulate at Porto Alegre, Brazil, has notified the Department that the Rio Grande do Sul State Railway has issued a call for tenders (No. 857) for the following:—

About 500 miles of rail, weighing 37 kg. per m., for laying on sleepers at 1,000 a mile, together with fishplates, bolts, nuts, washers, clamps and rail chairs

Complete metal framework for the new machine shops and the iron, steel and bronze foundries in Otavio, Lima, near Santa Maria

Overhead cranes, some of which are to be capable of lifting a locomotive. Capacity of cranes, 5 tons, 15 tons and 50 tons.

Machinery complying with and in the quantities shown in Viacao Ferrea Technical Specifications No. 212, 213 and 214

Twenty 180-to 250-h.p. diesel locomotives as in Viacao Ferrea Technical Specifications No. 18

Ten bogies for diesel railcars having tractive powers of 200 to 250 h.p. in the rear axle, or on both axles, and similar to that shown in drawing 15-F-940

According to a further report quoted by the Board of Trade Special Register Information Service, the Reconstruction Procurement Committee of the Ministry of Communications, Athens, has issued a call for tenders (No. 29/NE) for the supply of six double-clip switches 1:7 for standard-gauge railway tracks with Vignole type rails. Tenders should reach the Ministry of Communications, General Direction of Railways Procurement Committee for Reconstruction Materials, Athens, before December 4 (12 hr. Athens time).

A copy of the tender documents is available for inspection by representatives of United Kingdom manufacturers at the Board of Trade, Commonwealth Relations & Exports Department.

EUROPEAN TIMETABLE & THROUGH CARRIAGE CONFERENCE.—In addition to the decisions made at the European Timetable & Through Carriage Conference at Oslo last month and outlined in our October 19 issue, it was agreed that the "Nord Express" from Stockholm and Copenhagen via Hamburg should arrive in Paris 30 min. earlier next year. The running time of the "Scandinavia-Italy Express" (Copenhagen-Hamburg-Basel-Milan-Rome) has been cut by one hour from October 7 last; a portion of this train will run during next summer from Copenhagen to Munich and Vienna. A new connection, the "Alps Express," will run from Nyborg in Denmark via the Brenner to Rome.



## Notes and News

**Vacancy for Railway Carriage Draughtsman.**—A leading railway carriage draughtsman, with general experience, especially of unit construction, is required. See Official Notices on page 531.

**Vacancy for Senior Draughtsman.**—A senior draughtsman, with full knowledge of railway permanent way layouts, is required by an engineering firm in the Midlands. See Official Notices on page 531.

**Assistant Engineers Required.**—Applications are invited for the posts of assistant engineers required by the Nigerian Railway. The appointment will be for a tour of 18 to 24 months, which may be renewable. See Official Notices on page 531.

**District Mechanical Engineer Required.**—Applications are invited for the post of district mechanical engineer required by the Iraqi State Railways for one tour of three years in the first instance. See Official Notices on page 531.

**Fluidrive Engineering Co. Ltd.**—So that the name of the company may be more closely associated with its products the Hydraulic Coupling & Engineering Co. Ltd. will in future be known as the Fluidrive Engineering Co. Ltd.

**Increased Service on Northern Line, London Transport.**—From November 12, the frequency of Northern Line trains via Charing Cross will be increased, except at rush hours. More three- or four-car trains will be run instead of seven-car trains which are often lightly loaded in slack periods. Between Camden Town and Kennington via Charing Cross the service frequency will be increased on Mondays to Fridays from a train every 3½ min. to one every 2½ min. between 10 a.m. and 4 p.m., and from 3½ min. to 3 min. be-

tween 7 p.m. and 10 p.m. The City Line frequency will be unchanged. During these hours the service south of Kennington and north of Camden Town will also be increased.

**Irish Railway Record Society.**—The fifth Annual Dinner of the Irish Railway Record Society will be held on Saturday, November 24, at the Great Northern Railway (Ireland) Restaurant, Amiens Street Station, Dublin, at 7.0 for 7.30 p.m.

**British Railways Coal and Steel Carrying.**—British Railways again carried more coal last weekend, 409,050 tons in the 48 hours, which is the highest figure for six months. The total for the week was 3,254,520 tons. The latest figures for iron and steel show that 196,019 tons were conveyed during the week ended October 27 from the principal steelworks.

**Increased Price of Tea at Station Buffets.**—The price of a cup of tea in station buffets has been increased from 3½d. to 4d. It was raised in June from 3d. to 3½d. Sir Harry Methven, Chairman of the Hotels Executive, said that the increase was necessitated by increasing costs, including those of labour and of the replacement of broken cups.

**Steels Engineering Products Limited.**—On November 1, a luncheon was held at the Sunderland works of Steels Engineering Products Limited—a wholly-owned subsidiary of Steel & Co. Ltd.—to celebrate the production of the 100,000th agricultural implement for Harry Ferguson Limited. The group of companies comprising Steel & Co. Ltd. employs some 3,000 people, about 1,500 of whom are engaged at the Sunderland works, and in addition to agricultural plant the company manufactures other engineering products, including mechanical handling equipment and Coles mobile cranes, works trucks,

hoists, and so on. Among those present at the luncheon were Mr. L. G. Reid and Mr. E. Young, two of the Directors of Harry Ferguson Limited, with members of their staff, and representatives of the Ministry of Supply and trade unions. After the luncheon, Mr. J. Eric Steel, Managing Director of Steels Engineering Products Limited, presented Mr. Reid with a silver salver, suitably engraved to commemorate the occasion, and in the course of his remarks said that a far greater production would be possible if more steel was available. Mr. Reid replied. In the afternoon the visitors were shown over the assembly plant and the remainder of the works.

**Italian Labour for Permanent Way Maintenance.**—The first of the Italian labourers to be employed by British Railways on permanent way maintenance arrived in Great Britain this week. They form part of 1,000 Italians engaged by the Railway Executive under Ministry of Labour permit to meet the lack of manpower in the London Midland, Southern, Western, and Eastern Regions. The first arrivals were allocated to the Southern Region, where they are being accommodated in hostels, dormitory coaches, and private lodgings.

**British Electric Transformer Co. Ltd.**—The directors of the British Electric Transformer Co. Ltd., controlled by Crompton Parkinson Limited, recommend a final dividend of 2s. 5d. per 5s. ordinary share, equal to 48½ per cent. for the year to June 30. This compares with 3s. 10d. a share, or 76½ per cent. previously on a capital of £100,000, whereas the dividend now proposed is on £150,000. During the year the capital was increased by an issue of 200,000 of 5s. ordinary shares. The accounts show that the net profit for the year to June 30, after depreciation, tax, and so on, of £43,789 compares with £68,861 previously.

**Presentation to Brigadier Manton.**—Brigadier L. Manton, who retired recently from his post as Principal of British Railways School of Transport, Derby, was invited to lunch in London on November 1, by the "First Fifty" students, who attended the first course when the school was opened in 1938. Brigadier Manton was presented with a silver cigarette box inscribed "First Fifty" and a vellum containing the names of the remaining 39 still in railway service. Mr. A. E. Marriott, now District Goods Superintendent, London City, who is Student-President of the "First Fifty," made the presentation. Among those present were Messrs. W. H. Vine, Secretary of the Society and Chief of British Railways London Commercial Service; G. J. Aston, District Operating Superintendent, Rotherham, Eastern Region; T. E. Jackson, Assistant (Claims) to the Commercial Superintendent, London Midland Region; J. J. Wildman, Assistant (Indoor) to the Commercial Superintendent, London Midland Region.

**Development of River Tay Ports.**—In their review of trade harbours under the Transport Act, 1947. Members of the Docks & Inland Waterways Executive visited Dundee in April, 1949, and again in November, 1950, to examine the needs of the port, and held discussions with the Dundee Harbour Trustees, the Dundee Corporation, and representatives of users of the ports and of the workers. The report on Dundee by the Executive to the British Transport Commission, recently sets out the respects in which the Executive considers increased efficiency should be sought.

## Southern Region Motor Drivers School



Mr. C. P. Hopkins, Chief Regional Officer, Southern Region, inaugurating a mobile school for motor drivers at Nine Elms (see article on page 527). On left, Messrs. A. A. Harrison, Executive Officer (Road Transport), A. E. C. Dent, Executive Officer (Road Motor Engineering), Railway Executive, and W. H. F. Mepsted, Commercial Superintendent, Southern Region

## OFFICIAL NOTICES

## GOVERNMENT OF IRAQ

**DISTRICT MECHANICAL ENGINEER** required by the Iraqi State Railways for one tour of 3 years in the first instance. Salary Iraq Dinars 1,560 a year (I.D. 1 = £1). High cost-of-living allowance between I.D. 120 and I.D. 168 a year according to dependants. Free passages. Liberal leave on full salary. Candidates should have served an apprenticeship in a locomotive workshop on the construction or repair of steam locomotives, and have had some 10 years' subsequent practical experience in locomotive running sheds on the operation and maintenance of locomotives. They should hold a recognised degree in Mechanical Engineering and/or be Corporate members of the Institution of Mechanical Engineers. Apply at once by letter, stating age, full names in block letters, and full particulars of qualifications and experience, and mentioning this paper, to the CROWN AGENTS, 4, Millbank, London, S.W.1, quoting on letter M.28765.B. The Crown Agents cannot undertake to acknowledge all applications and will communicate only with applicants selected for further consideration.

**COMPANY** manufacturing diesel electric locomotives will accept applications for the following staff:—Design Engineers and Design Draughtsmen. Highly specialised in electrical and mechanical design and manufacturing procedure of d.c. traction generators, traction motors and control equipment. Also Draughtsmen experienced on similar work. Good salaries paid to men of first class experience. Three years agreement. Every facility to find suitable accommodation will be given. Offers only to first class men.—Box 245, *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

**BOUND VOLUMES**.—We can arrange for readers' copies to be bound in full cloth at a charge of 25s. per volume, post free. Send your copies to the SUBSCRIPTION DEPARTMENT, Tothill Press Limited, 33, Tothill Street, London, S.W.1.

The B.T.C. has now requested the Executive to undertake consultations in the preparation of a scheme, in accordance with Section 66 of the Act, "to secure the efficient and economical development, maintenance, or management" of the harbour, in consultation with the harbour authorities, local bodies, and workers. Members of the Docks & Inland Waterways Executive are accordingly visiting Dundee and Perth on November 15 and 16.

**Institution of Railway Signal Engineers.**—At a meeting of the Institution of Railway Signal Engineers to be held at the Dining Club, Hunts' Bank, Manchester, at 6.30 p.m. on November 21, Mr. L. E. Thompson will read a paper on "Rectifiers in Railway Signalling Circuits."

**Institute of Transport.**—A paper entitled "Marine Transport of Oil in Bulk" will be read before the Institute of Transport, on November 19, by Mr. W. G. Weston, General Manager, Marine Department, Anglo-Saxon Petroleum Co. Ltd. The meeting will be held at the Jarvis Hall (R.I.B.A.), 66, Portland Place, W.1, at 5.45 p.m.

**B.O.A.C. Operating Profit.**—Sir Miles Thomas, Chairman of the British Overseas Airways Corporation, announced on October 31 that in the first half of the current financial year B.O.A.C. made an operating profit of £974,000. After allowing for payment of interest on capital and for losses by subsidiary companies and other non-operating costs there was a profit of £133,000.

**Association of British Travel Agents Banquet.**—Speaking at the Travel Banquet of the Association of British Travel Agents in Brighton on November 1, Lord Hurcomb, Chairman of the British Transport Commission, said that, given the present volume of spending power, passenger fares averaging double prewar should not appear unduly high, against the much higher cost of most other "optional"

**LEADING** Railway Carriage Draughtsman required with general experience, especially of unit construction. Diesel railcar experience very desirable.—Apply Box 263, *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

**JUNIOR TRAFFIC OFFICIALS** with railway traffic apprenticeship experience. Age about 25, single, required for service on railways in Peru and Bolivia. Apply to the Secretary of the PERUVIAN CORPORATION LIMITED, 144, Leadenhall Street, London, E.C.3.

**SENIOR DRAUGHTSMAN** required with full knowledge of Railway Permanent Way Layouts, etc., by Engineering Firm in the Midlands. Providing applicant enjoys good health, a young man is not essential, and a retired British Railways Draughtsman would be considered. If required, a suitable house would be available. State age, experience, and salary required.—Box 267, *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

**PERUVIAN CORPORATION LIMITED:** Required for British-owned Railways in South America. Accountants aged 25-30. Knowledge of railway accountancy and of Spanish advantageous; experience of staff management an advantage. Three years' contract, renewable, liberal leave, passage paid. Salary up to £1,000 per annum. Apply to the Secretary, PERUVIAN CORPORATION LIMITED, 144, Leadenhall Street, London, E.C.3.

**GLOSSARY OF WOOD.** A technical dictionary for all associated with timber and its uses. Ten thousand terms about timber—the common and the little known, the old and the new. Ten thousand definitions covering the entire field of timber and its uses—growth, marketing, utilisation. The commercial timbers, their qualities and uses. Tools and working equipment, are all here explained, simply, concisely and accurately. Illustrated by many clear line drawings. Price 21s. net. By post 21s. 9d. Tothill Press Limited, 33, Tothill Street, London, S.W.1.

services and goods used for recreation. The B.T.C. did not accept the high level of fares as the reason for the decline in traffic. Travel could be "sold" to many who would otherwise stay at home, by study of public tastes and of provision of new facilities without incurring disproportionate costs. That was the essential purpose of the travel agent. Lord Hurcomb commented on the record cross-Channel traffic in the summer of 1951, and pointed out that the volume of travel within Great Britain also was well maintained. He hoped that the B.T.C. had shown tangible recognition of travel agents' services in the new scales of commission agreed last year.

**North Eastern Region Runabout Tickets.**—During the season April 30 to October 31 the North Eastern Region of British Railways sold 50,969 holiday runabout tickets bringing in £48,726.

**Demand for Seven-Day Holiday Tickets.**—British Railways were urged by the annual conference of the British Federation of Hotel & Boarding House Associations at Rothesay on November 1 to reintroduce 7 and 14-day summer tickets to holiday-makers at reduced rates.

**Road Accidents in August.**—Road casualties in August totalled 21,819, and 470 persons were killed and 21,349 injured, 5,349 seriously. The position was rather worse than in August, 1950, when casualties were 20,951, but not quite so serious as in August, 1938, when the total was 22,858.

**Barsi Light Railway Co. Ltd.**—The annual meeting of the Barsi Light Railway Co. Ltd. was held in London on October 23, when a statement prepared by Mr. P. H. Maffin, Chairman, was read in his absence by Mr. D. C. Wilson, a Director of the company. This said that last year was again a good one for earnings, which were only Rs. 28,500 less than in the previous year, which was a record, but, unfortunately, working expenses were higher by

## HIS MAJESTY'S COLONIAL SERVICE

**APPLICATIONS** are invited for the following posts:—Assistant Engineers (Capital Works) 27333/6, Nigerian Railways. Appointment will be for a tour of 18-24 months on contract/gratuity terms, which may be renewable, in the salary scale of £830-£1,450. Point of entry being determined by approved professional experience and War service. A temporary cost-of-living allowance of from £63-£110 per annum is at present payable. An outfit allowance of £60 is payable on first appointment. Free passages are provided for an officer and his wife; and a grant of up to £150 per annum is payable for children's passages or education. Furnished quarters, where available, are provided at a rent varying from £75 to £150 according to salary. Leave on full pay is granted at the rate of one week per month of resident service. Candidates should have passed or hold exemption from Sections "A" and "B" of the A.M.I.C.E. examinations; and should have some years experience of railway civil engineering, particularly bridge work. Intending candidates should apply in writing to the DIRECTOR OF RECRUITMENT (COLONIAL SERVICE), Colonial Office, Sanctuary Buildings, Great Smith Street, S.W.1, giving brief details of their age, qualifications and experience. They should mention this paper and quote the reference number (27333/6).

**FOR SALE:** Kendall & Gent Plano-miller. Capacity 12 ft. x 6 ft. x 6 ft., drive by 25-h.p. motor through gearbox, voltage 400/3/50. Can be seen working. Cheap for quick sale.—Box 255, *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

**INTERNATIONAL RAILWAY ASSOCIATIONS.** Notes on the work of the various associations concerned with international traffic, principally on the European Continent. 2s. By post 2s. 2d. *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

Rs. 47,500, due to heavy repairs and maintenance of buildings, renewal of sleepers, and the increased cost of provident fund bonus and dearness allowance. The question of working expenses was constantly under review. The position on other Indian railways was also serious, and since April 1, 1951, the Government of India had sanctioned increased rates and fares. This had given them approximate gross earnings of Rs. 28,30,000 for the half-year ended September 30 as compared with Rs. 23,71,000 for the corresponding period of last year.

**Institution of Locomotive Engineers.**—Mr. R. W. Stuart Mitchell, Chief Development Engineer, Diesel Engine Division, the English Electric Co. Ltd., will read a paper on "Diesel Rail Traction," at a meeting of the Institution of Locomotive Engineers to be held at 5.30 p.m. on November 21, at the Institution of Mechanical Engineers, Storey's Gate, London, S.W.1.

**South Wales & Monmouthshire Railways & Docks Debating Society.**—On November 21, Mr. A. W. J. Dymond, Assistant to Mechanical & Electrical Engineer, Western Region, will deliver a paper entitled "Gas Turbines," to the South Wales & Monmouthshire Railways & Docks Lecture & Debating Society. The meeting will be held in the Angel Hotel, Westgate Street, Cardiff, at 6.30 p.m.

**Turnberry Hotel (Ayrshire) Winter Service.**—The Hotels Executive announces that during the winter, with the exception of the Christmas and New Year period from December 22, 1951, to January 7, 1952, Turnberry Hotel, Ayrshire, will be operated on a restricted basis. Rooms available and service will be limited. Full facilities of the hotel will be restored at Easter for the 1952 season.

**Passenger Movement to and from Britain.**—Journeys to and from the United Kingdom in the first six months of 1951 totalled 2,499,000, or 10 per cent. over the figure for the same period of 1950, and 41 per

cent. over that of 1938. Of this total, 1,799,000 journeys were by sea, and 700,000 by air, which latter is 28 per cent. of the total. Traffic to and from the Irish Republic and the Channel Islands showed increases of 4 and 7 per cent. respectively on 1950; there was an even more marked increase in Continental traffic, air journeys increasing by nearly 29 and sea journeys by 8 per cent. The rise in Continental traffic was chiefly on routes to and from France and Belgium.

### Forthcoming Meetings

November 13 (Tue.).—Institution of Civil Engineers, Great George Street, Westminster, S.W.1, at 5.30 p.m. Discussion: "Economy in Railway Civil Engineering." "Economy through Labour Productivity & Incentive Schemes," by Mr. G. C. Stevens; "Economy through Organisation," by Mr. J. Taylor Thompson; "Economy by Supervision," by Mr. A. K. Terris; "Economy through Design," by Mr. P. S. A. Berridge.

November 13 (Tue.).—British Railways, Southern Region, Lecture & Debating Society, at the Chapter House, St. Thomas Street, S.E.1, at 5.45 p.m. A Miscellany of Transport Films.

November 13 (Tue.).—Retired Railway Officers' Society, autumn luncheon at the Criterion Restaurant, Piccadilly Circus, London, at 12.30 for 1 p.m.

November 13 (Tue.).—Permanent Way Institution, Leeds Section, at the Leeds Church Institute, Albion Place, Leeds, 1, at 7 p.m. Talks led by Mr. Forester Fielding and other members on "The 1951 Summer Convention held in Holland last May."

November 14 (Wed.).—Institute of Transport, Anniversary Luncheon at the Connaught Rooms, Great Queen Street, London, W.C.2, at 12.30 for 1 p.m.

November 14 (Wed.).—Institute of Transport, Southern Section, at the Harbour Offices, Southampton, at 5 for 5.45 p.m. "The Human Spirit in the Transport Industry," by Mr. C. E. R. Sherrington.

November 14 (Wed.).—Railway Students' Association, London School of Economics, Haughton Street, Aldwych, W.C.2, at 6 p.m. "Public Relations—Mainspring of Industry," by Mr. George Dodson-Wells, Chief Public Relations Officer, London Transport Executive.

November 15 (Thu.).—Diesel Engine Users' Association, at Caxton Hall, Westminster, S.W.1, at 2.30 p.m. "Instrumentation for Diesel Engines in Service," by Mr. J. D. Thorn.

November 15 (Thu.).—British Railways, Western Region, London Lecture & Debating Society in the Clerks' Dining Club, Bishops Bridge Road, Paddington, W.2, at 5.45 p.m. "Town Planning as it affects the Western Region," by Mr. R. G. Henbest, Estate & Rating Surveyor, Western Region.

November 15 (Thu.).—Institute of Transport, Northern Ireland Section, at 21 Linenhall Street, Belfast, at 6 p.m. "Transport Conditions in Great Britain," by Mr. M. A. Cameron.

November 16 (Fri.).—Institute of Transport, Tees-side Section, at the Cleveland Scientific & Technical Institution, Middlesbrough, at 7 p.m. "Road Haulage as a National Service," by Major General G. N. Russell.

### Railway Stock Market

After a further reaction due to the fall in British Funds stock markets steadied when the new Government plans were announced. The latter it is believed will do much to meet the difficulties arising from inflation and the heavy drain on the sterling area gold and dollar reserves. The big talking point now is whether there is to be an early rise in the Bank rate because it has been assumed that dearer money may be favoured by the Government as a means of checking inflation. British Funds have fallen heavily although there has been some recovery. At the end of last week War Loan 3½ per cent. fell to its lowest since it was converted from a 5 per cent. stock in 1932. Treasury 2½ per cent. was down to the lowest level since it was issued by Mr. Dalton as part of the "cheap money" policy. The fall in British Funds has been largely responsible for the decline in leading industrial shares. Selling has not been heavy, though it influenced prices sharply, because buyers were showing a waiting attitude. Moreover, with yields on British Funds increased, it is only logical that there should be a general readjustment of the yield structure of markets, including industrial ordinary or equity shares. The market is particularly interested in whether E.P.T. is to be introduced soon or left until next year. E.P.T. is unlikely to mean lower dividends where current dividend payments are well below actual earnings on shares; but on the other hand, it will in numerous cases, it is assumed in the market, mean that increased profits earned during the rearmament period will go mainly to the Exchequer and leave only limited scope for higher dividends.

Foreign rails reflected the uncertainty in markets generally, but, after small declines, tended to strengthen. Canadian Pacifics have again gone back with Wall Street and were also affected by the latest traffic figures and news of rising costs. The price has come back to \$66, although the market remains hopeful that a higher dividend is in prospect. Canadian Pacific preference receded to £72 and the 4 per cent. debentures to £87½. White Pass Yukon 5 per cent. debentures changed hands up to 225 and the 6 per cent. income debentures were 97.

Manila "A" debentures came back to 76 and the 5 per cent. preference to 8s. 3d. On the other hand, there was

further buying of Mexican Central "A" Bonds which rose to 92½, while the "B" were 17½. National of Mexico non-assented and plan "B" stocks were also higher with the 4½ per cent. non-assented at 45½ and plan "B" 45. United of Havana stocks receded in the absence of demand and the 1906 debentures came back to 18½. Hopes that the good trend in traffics will continue helped Antofagasta which were firm at 17½ with the preference stock at 75½. Bolivar "C" debentures were 48 and La Guaira ordinary stock 95. Nitrate Rails shares were 25s. 6d. and Taltal 22s.

San Paulo 10s. units eased to 15s. 3d. and Brazil Rail bonds were 5½. There was little business in Leopoldina stocks. The ordinary was 10½, the preference eased to 26, the 4 per cent. debentures were 93½, and the 6½ per cent. debentures 141, while Leopoldina Terminal 5 per cent. debentures have been easier at 95. Guayaquil & Quito 5 per cent. first debentures were 35 and Paraguay Central 6 per cent. debentures 32.

Road transport shares kept generally steady though sentiment did not appear to be affected to any extent by the prospect of the return of road haulage to private enterprise. West Riding were 45s. 6d. xd., Southdown receded to 91s. 3d., and Lancashire Transport were 55s. Maidstone & District marked 60s. 6d. and Aldershot & District 80s. East Kent shares were also approximately 80s. and B.E.T. deferred stock was £470 xd.

Engineering and kindred shares regained part of earlier declines—particularly Vickers. John Brown, Cammell Laird, Guest Keen, and B.S.A. have also tended to strengthen as news may be impending of Government plans and intentions in regard to de-nationalisation of steel. T.W. Ward have rallied strongly to 79s. 3d., and Babcock & Wilcox were better at 77s. 9d., but Thornycroft eased on the full report and the reference to new capital needs. Ruston & Hornsby were 37s. 9d. and Powell Duffryn rallied to 35s. Among shares of locomotive builders and engineers, Hurst Nelson were 62s. 6d., Birmingham Carriage 39s., Vulcan Foundry 27s., North British Locomotive 19s., Beyer Peacock 32s. 9d., and Gloucester Wagon 15s. 9d. Charles Roberts receded to 26s. 6d. Wagon Repairs 5s. shares were 13s. 4½d.

### Traffic Table of Overseas and Foreign Railways

Railway	Miles open	Week ended	Traffics for week		No. of week	Aggregate traffics to date			
			Total this year	Inc. or dec. compared with 1949/50		Total	Increase or decrease		
						1950/51			
Canada South & Cen. America									
Antofagasta ...	811	26.10.51	£ 142,630	+	£ 55,630	43	£ 5,183,110	+	£ 2,346,646
Costa Rica ...	281	Sep., 1951	c1,134,577	+	c208,010	13	c3,703,247	+	c357,374
Dorada ...	70	Aug., 1951	36,976	—	5,426	35	288,447	—	24,505
Inter. Ctl. Amer. ...	794	Sep., 1951	\$923,671	—	\$76,767	39	\$9,945,698	—	\$281,585
Paraguay Cent. ...	274	26.10.51	\$355,897	+	£113,592	17	\$5,631,420	+	£2,348,712
Peru Corp. ...	1,050	Sep., 1951	\$7,933,000	+	\$91,000	13	\$24,517,000	+	\$1,070,000
" (Bolivian Section)	66	Sep., 1951	Bs.14,404,000	+	Bs.1,620,000	13	Bs.41,395,000	+	Bs.10,886,000
Salvador ...	100	July, 1951	c£25,000	+	c20,000	4	c£25,000	+	c20,000
Taltal ...	147	Sep., 1951	\$2,449,000	+	\$738,700	13	\$6,304,000	+	\$1,825,300
Canada									
Canadian National†	23,473	Sep., 1951	17,646,000	+	279,000	39	153,415,000	+	21,228,000
Canadian Pacific†	17,037	Sep., 1951	11,990,000	—	247,000	39	105,001,000	+	14,030,000
Various									
Barsi Light* ...	167	Aug., 1951	22,500	—	1,785	21	191,250	+	31,920
Egyptian Delta ...	607	10.4.51	17,513	—	267	4	17,513	—	267
Gold Coast ...	536	Aug., 1951	220,509	+	16,972	21	1,280,126	+	109,832
Mid. of W. Australia	277	July, 1951	46,474	+	2,594	4	46,474	+	2,594
South Africa ...	13,398	13.10.51	1,894,367	+	185,148	28	52,940,179	+	6,419,844
Victoria ...	4,744	July, 1951	1,732,775	+	23,478	4	—	—	—

\* Receipts are calculated at 1s. 6d. to the rupee

† Calculated at \$3 to £1